

## COVID-19 MEDIA DISCOURSE AND STIGMA: INSIGHTS INTO FOOD AVOIDANCE AND TRAVEL INTENTIONS

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**Abstract:** Stigma has grown in importance as a concept for understanding consumer behaviour during crises and gaining insights into post-pandemic food and travel intentions. While previous studies examined stigma from the perspective of stigmatised individuals, the current study investigated stigma from the perspective of other societies and their willingness to visit stigmatised countries or dine at stigmatised restaurants. The main aim of the current paper was to analyze the effect of stigma associated with COVID-19 on travel intentions to stigmatised countries and food avoidance at stigmatised restaurants. It also examined the effect of media discourse on stigma. A number of 593 questionnaires from Egyptians and structural equation modelling (SEM) were used to test the model. The findings showed that stigma associated with COVID-19 has a significant and negative effect on travel intentions to stigmatised countries, while stigma has a significant and positive effect on avoiding dining at stigmatised restaurants. Additionally, media discourse significantly contributes to the stigma associated with COVID-19. On the other hand, there was no significant impact of food avoidance at stigmatised restaurants on the intention to travel to stigmatised countries. COVID-19-related discrimination and stigma must be stopped, and the media should enhance awareness without raising anxiety. The current research provided important insights that can be used to help revitalise the travel and food industries and to combat stigma-related prejudice.

**Keywords:** Stigma, COVID-19, Media Discourse, Travel Intention, Food Avoidance, JEL Classification: L83, Z32

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### INTRODUCTION

When fighting an outbreak such as COVID-19, we must be guided by solidarity, not stigma. The greatest enemy we face is not the virus itself; it's the stigma that turns us against each other. "We must stop stigma & hate!" Tedros Adhanom, Director-General of the World Health Organization (WHO).

The coronavirus SARS-CoV-2 (COVID-19), which was initially reported in China, in December 2019, spread quickly around the world, killing millions of people. This global spread has created an environment where Chinese and Asian people are stigmatised (Devakumar et al., 2020; Přívara, 2022). Stigma is a significant part of sociology and criminology research (Cerdeira-Jara and Harding, 2024; Goffman, 1963). Stigma refers to an attribute, behaviour, or reputation that is socially discrediting in a specific way (Aranda et al., 2023). COVID-19's unprecedented condition witnessed an immediate spread of news and signs of panic buying (Ho et al., 2020) as well as stereotyping and stigma to certain countries or groups in society (Abdelhafiz and Alorabi, 2020). The opening quote by the WHO director-general underlined the need to avoid stigmatisation in general and in crises in particular. Mental health and psychological well-being could be negatively influenced by stigma (Xiao et al., 2023).

Stigma could cause avoiding, shame, disgust, and social exclusion (Ponder et al., 2023). Stigmatisation arises from people's worries in times of uncertainty, including in public health situations (Hing, 2012). Many Asian and Chinese were stigmatised and stereotyped during the previous epidemics due to the public's fear of the unknown, and the media fueled this fear with a range of associative cues (McCauley et al., 2013). The COVID-19 pandemic's widespread media coverage aided in the propagation of fear of infection and associated stigmatising practices (Ho et al., 2020).

In the USA, there were unjustified discrimination, verbal harassment, shunning, physical assaults, spitting or coughing, and other civil rights violations (He et al., 2020). Anti-Asian hate crimes have increased by 21% in the UK since the pandemic in May 2020 (The Guardian, 2020). The anti-Chinese and Asia discourse in most countries of the world has escalated, such as preventing all Chinese visits to South Korea (Fottrell, 2020), online harassment and racist sentiments in Vietnam, Japan, Saudi Arabia, Malaysia, Thailand, Indonesia, Sri Lanka, Iran, and India (Bloomberg News, 2020; Rich, 2020), prejudice against a

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person with apparent Asian features in Egypt (Ren et al., 2020), verbal abuse in Brazil (Kyodo, 2020), and labeling an entire street as “coronavirus” due to one verified COVID-19 case in India (Joshi and Swarnakar, 2021).

Fear of sickness and stigma has had a catastrophic effect on the tourism and travel sector (Elkhwesky, Abuelhassan et al., 2023; Elkhwesky, Derhab et al., 2023; Lamb et al., 2021). Asian restaurants experienced an 18.4% decrease in traffic in comparison to non-Asian restaurants in 2020 in the USA (Huang et al., 2023). To limit COVID-19's devastating effects on tourism businesses, we need to better understand the public's psychology in post-pandemic travel (Zheng et al., 2021). Previous studies have investigated the perceived health risks associated with travel and how they affect tourism outcomes (Jonas et al., 2011) and forecasting tourism demand (e.g., Tang and Wong, 2009). These investigations are supplemented with studies that look at the consequences of diseases and pandemics on tourism, both economically and in terms of visitor behaviour (e.g., Yang et al., 2020). Many researchers have studied how the public perceives food safety risks (e.g., Krystallis et al., 2007) and the role of the media in shaping public risk perceptions (Bakir, 2010). However, it is unclear how stigma and media discourse are linked to travel intention to stigmatised countries and food avoidance at the local level.

Previous studies concentrated on stigma and discrimination against patients who have survived COVID-19 (Xiao et al., 2023). Prior research also focused on media discourse and stigma in such contexts as people with dementia (Bacsu et al., 2022), fat stigma (Wanniarachchi et al., 2023) or obesity stigma (Jolin and Stanford, 2023). There are recent calls that stigma research should be expanded (Aranda et al., 2023). Food stigma during pandemics is a promising area for future research (Faour-Klingbeil et al., 2022). Importantly, there is a clear gap in investigating the effect of stigma associated with COVID-19 on Asian restaurants (Huang et al., 2023) and travel (Delgado, 2023). In addition, Tang et al. (2023) suggested conducting more research on the impact of racial discrimination or stigma associated with COVID-19 on the foodservice industry. To bridge the gap, the authors of the current research developed and tested a novel model, built on the protection motivation theory (Folkman and Lazarus, 1980; Rogers, 1975; Ruan et al., 2020), the reasoned action approach (Fishbein and Ajzen, 2010), the theory of planned behaviour (Ajzen and Kruglanski, 2019), and cultivation theory (Gerbner, 1998).

Accordingly, the current study raises three questions: (1) Does stigma associated with COVID-19 affect travel intentions to stigmatised countries and food avoidance (avoiding dining out at Chinese and Asian restaurants in the consumer's country of origin)? (2) Do food avoidance perceptions at the local level spill over to consumer travel intentions to stigmatised countries? and (3) Does media discourse affect stigma associated with COVID-19? While previous studies addressed stigma from the perspective of stigmatised individuals (de Macêdo et al., 2023; Ponder et al., 2023), the current study examines stigma from the perspective of other societies and their intention to travel to stigmatised countries or dine out at stigmatised restaurants. In addition, the results contribute to research on the link between media discourse and stigma (Joshi and Swarnakar, 2021).

Specifically, the current study contributes to the understanding of this social phenomenon and its impact on food and travel contexts. The findings offer insights for effective communication during and post-public pandemics to support the recovery of the tourism business in general and alter stigmatised perceptions particularly.

## **THEORETICAL FOUNDATION AND HYPOTHESES DEVELOPMENT**

### **Stigmatization associated COVID-19**

People are always looking for a scapegoat in the time of epidemics by blaming new disease outbreaks on individuals or groups, who live outside of their social sphere (Wagner-Egger et al., 2011). For example, in 1892, Russian Jewish immigrants from Eastern Europe were blamed for an outbreak of cholera and typhus in the New York City; native Americans were blamed for the 1993 outbreak of hantavirus in the United States; Asian societies have also been stigmatised due to the SARS outbreak of 2003 (Pearson et al., 2004). Stigma is a socially built exclusionary mechanism, not an illness or a condition in an individual (Major and O'Brien, 2005). Stereotyping, labelling, prejudice, marginalisation, ostracism, status loss, and discrimination are all notions that fall under this broad umbrella word (Ramasubramanian and Yadlin-Segal, 2017).

COVID-19 is a social and biological pandemic (Cehan and Iașu, 2024; Koon et al., 2021; Vávrová, 2022; Verma et al., 2024). Stigma is the imputation of the same meta stereotypes to all members of a community justly or unjustly (Goffman, 1963). People from China and other Asian countries are stigmatised by association (Moufakkir, 2015). Stigma is a moral concern, which intervenes in what matters in people's lives (Yang et al., 2007). As a result, it differs by culture, and an interpretive lens is required to comprehend the experiences of both those who are stigmatised and those who stigmatise (Labbé et al., 2022). While there has been a lot of research on the negative effects of stigma (Doyle and Barreto, 2023; Pan et al., 2023), there has been less discussion about how stigma is combated in other societies (Howarth, 2006; Stuart et al., 2011). Furthermore, while the majority of empirical research focuses on stigma as an individual experience, stigmatisation is a broader social process that may be applied to a group (Rivera, 2008; Van Laar, and Levin, 2006). Individuals and groups may have complicated and varied reactions in response to collective stigmatisation (Howarth, 2006).

### **Media discourse**

Media discourse is defined as interactions that take place through a broadcast platform, whether spoken or written (Borshchevska, 2012; O'Keeffe, 2011). Media discourse can frame certain problems and generate public debate with a certain slant or through a specific lens (Bognar and Puljić, 2022; Carrier, 2022). In previous epidemics, media discourse has contributed to stigmatisation by forming, influencing or giving context to the public opinion (Brooks et al., 2020). It not only reflects perceptions but also can change and influence behaviour (Mayer et al., 2021). Media discourse spread to promote a paradigm that separates us from others (Joye, 2010; Saeed, 2007). The other is frequently viewed as a danger rather than as normal, neutral or benign (Monson, 2017). China and Asian countries became the others in the Covid-19's

global misleading media discourse (Amnesty International, 2020), resulting in explicit discrimination, social exclusion, and stigmatisation of Chinese and Asians (Al-Azab et al., 2021; He et al., 2020).

Table 1. COVID-19 headlines, sources, and date of publication Source: (Noel, 2020)

Headline	Source	Date of Publication
Coronavirus: Outrage over Chinese blogger eating 'bat soup' sparks apology	Fox News	January 28, 2020
What's spreading faster than coronavirus in the US? Racist assaults and ignorant attacks against Asians	CNN US	Feb 21, 2020
As coronavirus spreads, so does xenophobia and anti-Asian racism	Time	March 6, 2020
No, calling the novel coronavirus the 'Wuhan virus' is not racist	USA Today	March 11, 2020
Trump defends using 'Chinese virus' label, ignoring growing criticism	The NYT	March 18, 2020
Sen. Cornyn: China to blame for coronavirus, because 'people eat bats'	NBC News	March 18, 2020
Trump on 'Chinese virus' label: 'It's not racist at all'	Politico	March 18, 2020
Yes, of course, Donald Trump is calling coronavirus the 'China virus' for political reasons	CNN International	March 20, 2020
Film club: "Coronavirus racism infected my high school"	The NYT	March 20, 2020
Spit on, yelled at, attacked: Chinese Americans fear for their safety	The NYT	March 23, 2020
"They just see that you're Asian and you are horrible": How the pandemic is triggering racist attacks	Vox	March 25, 2020
Asian Americans reported hundreds of racist acts in last week, data shows	Fox News	March 27, 2020
'They look at me and think I'm some kind of virus': What it's like to be Asian during the coronavirus pandemic	USA Today	March 28, 2020
Covid-19 has inflamed racism against Asian Americans. Here's how to fight back	CNN	April 11, 2020
How the coronavirus is surfacing America's deepseated anti-Asian biases	Vox	April 21, 2020
We are not COVID-19: Asian Americans speak out on racism	Nikkei Asian Review	May 9, 2020
US senator criticized for telling students China is to blame for COVID-19	The Guardian	May 17, 2020
Asian American doctors and nurses are fighting racism and the coronavirus	The Washington Post	May 19, 2020
I don't scare easily, but COVID-19 virus of hate has me terrified	ABC News	May 23, 2020
Trump scapegoats China and WHO—and Americans will suffer	Foreign Policy	May 30, 2020
America's 'two deadly viruses'—racism and COVID-19 viral among outraged Twitter users	Forbes	May 31, 2020

**Hypotheses development**

Figure 1 exhibits the conceptual framework of the current study. Stigma associated with COVID-19 is expected to have a significant effect on travel intentions to stigmatised countries and avoiding dining out at stigmatised restaurants on the local level. Food avoidance is presumed to be negatively related to travel intentions to stigmatised countries. Media discourse is proposed to have a significant effect on stigma.

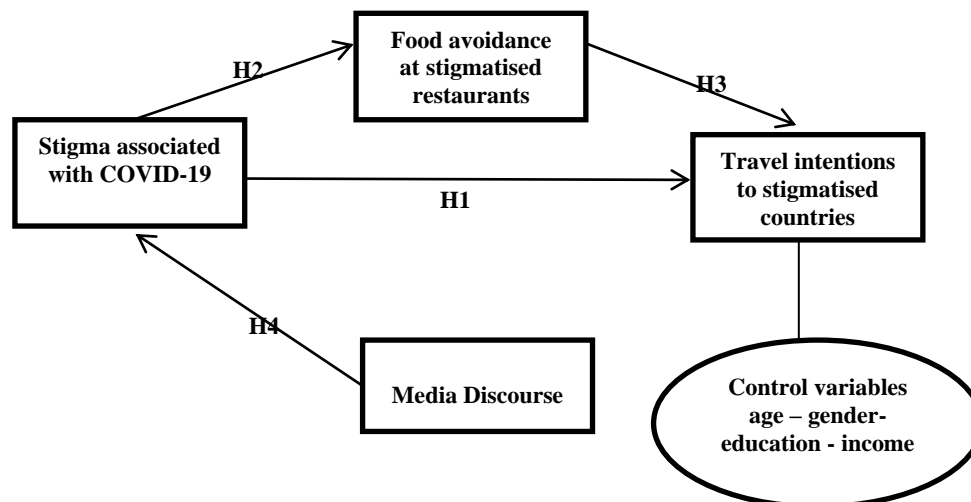


Figure 1. Conceptual framework and hypotheses (Source: Authors' elaboration)

**Stigma and travel intentions**

According to the protection motivation theory, people may create protection motives (Rogers, 1975) and use various coping methods (Folkman and Lazarus, 1980) to deal with the fear generated by infectious diseases (Devkota et al., 2022). This was a strong indication of their travel avoidance (Ruan et al., 2020) or adoption of protective tourism behaviours (Fisher et al., 2018). Travel intention was defined by Ahn et al. (2013) as the possibility of traveling to a destination. The COVID-19 pandemic wreaked havoc and created a need to anticipate future visitor behavioural intentions (Bae and Chang, 2021). Given the dread of prior infectious diseases (SARS, Ebola, Avian flu, and MERS), it was discovered that even after the epidemic has passed, the rate of travel to stigmatised nations has reduced dramatically (World Tourism Organization, 2004; World Travel and Tourism Council, 2018). Fear of the pandemic and traveller perceptions have resulted in significant reductions in travel demand during the COVID-19 outbreak (Ahmed et al., 2020; Imroz et al., 2023; Li and Wang, 2023; Zheng et al., 2021). The existence of risk, whether real or perceived, has the potential to alter the nature of

travel decisions. When perceived risks or safety fear are factored into travel decisions, they have the potential to become overriding factors, changing the traditional decision-making models and prompting travellers to change their plans (Novelli et al., 2018; Sönmez and Graefe, 1998). People's impressions of stigmatised individuals and their countries of origin have a significant impact on their willingness to go to those countries (Hasan et al., 2017). Because the most significant considerations in travel selections are safety and health risks (Dolnicar, 2005), tourists' perceptions of threats may include the likelihood of pandemic infection and the serious implications of infectious disease infection in post-pandemic travel. Tourists may protect themselves by avoiding travel during the pandemic if they believe the risk of travel is high (Zheng et al., 2021).

Based on stigmatisation theory, we argue that the way tourists perceive and respond to the phenomenon of the stigma associated with COVID-19 may play an important role in predicting their intentions to visit a destination. While tourists are drawn to destinations because of the good attributes they present (safe, warm, and comfortable environments), stigmatisation causes these elements to deteriorate, which in turn negatively affects their visit intentions (Gössling et al., 2012). Zenker et al. (2021) suggested that in a pandemic situation, it would be useful to investigate the impacts of media reports as mediators for travellers' anxiety levels between individual coping behavior (safety steps to deflect hazards) and travel intentions or other potential outcomes. In their study, Masters-Waage et al. (2020) indicated that there is no evidence that virus naming impacted persons' attitudes toward Chinese individuals. Accordingly, the following hypothesis is proposed:

**H1.** Stigma associated with COVID-19 has a significant effect on consumer travel intentions to stigmatised countries.

### **Stigma and food avoidance**

Public worries regarding Chinese food are becoming increasingly apparent (Carman and Heil, 2020). This is not only because of the pandemic, which has caused individuals to reconsider and even change their customary approaches to food but also due to other aspects of the customs, traditions, and culture of eating and buying food in China and some Asian countries (Chen and Bettencourt, 2020). In particular, the traditions of wild animals sold in markets, have been criticized and suspected of being at the root of the pandemic, leading to the avoidance of Chinese and other Asian restaurants in several countries (Labbé et al., 2022). As a result, food safety issues that arise in one nation during or after a pandemic can have a major impact on laypeople's risk perceptions in other countries (Shim and You, 2015). COVID-19 is harming Chinese food outside of China. For example, people in the USA began connecting COVID-19 to dining in Chinese restaurants, long before cases of COVID-19 were documented in their areas (Glassberg, 2020). During the height of the SARS epidemic in 2003, some people emailed others to avoid eating in Asian restaurants scattered across the USA (Eichelberger, 2007).

People need food products that have desirable consumption characteristics, are free of contamination, and are safe (Komínková et al., 2020; Yeung and Morris, 2001). Perception of the risks associated with COVID-19 may influence people's food buying and consumption behaviours (Janssen et al., 2021). The risk perception associated with a certain food is a strong predictor of this food avoidance and consumption behaviour (Shim and You, 2015). As a result of the stigma associated with COVID-19, stress, worry, and anxiety increased (Dubey et al., 2020). This is likely to have caused people to look for new ways to cope with these issues, one of which is undoubtedly food avoidance (Sorić et al., 2021).

Individuals who are worried about specific food choice hazards (by linking it to a specific country that is stigmatised with an epidemic) are more inclined to behave in ways that reduce personal risk by avoiding this food or limiting stigmatised food purchases (De Vocht et al., 2015; Klein et al., 2009) as well as avoiding travel to the stigmatised countries. For international travellers, safety assurance is the most important component of service quality (Gilbert and Wong, 2003). Liang et al. (2019) claimed that people are less likely to use any defence mechanism if they believe that a threat can be avoided or that they are in control of the circumstance. The perceived risk theory states that ambiguity and perceived consequences have a significant impact on consumers' decision-making and behaviour when various types (such as physical, health, social, and psychological) of specified risks are present (Dedeoğlu et al., 2022). The COVID-19 epidemic has made the idea of risk perception even more crucial when researching behavioural intention (Cori et al., 2020). Hakim et al. (2021) came to the conclusion that people's perceptions of danger had a big impact on whether they planned to go to Asian restaurants during the pandemic, depending on their preferences for cuisine as well as the guarantee provided against pandemic-related hazards. The attitudes of tourists toward food differ depending on their individual dietary preferences and desire for novel travel experiences (Hjalager, 2004).

Due to the pandemic, the intention to eat local Asian food became a contradictory combination of linked incentives and health hazards (Dedeoğlu et al., 2022). When making travel arrangements, visitors consult experienced travellers for advice on the destination's safety and risk exposure (Lo et al., 2011). Electronic word-of-mouth has a favourable impact on consuming Asian food (Wang et al., 2017) and may affect travel intentions to stigmatised countries. Therefore, it could be inferred that higher levels of the perceived threat from COVID-19 will harm travel intention. The protection motivation theory (Folkman and Lazarus, 1980; Rogers, 1975; Ruan et al., 2020) could suggest a significant association between the fear generated by pandemics such as COVID-19 and protection behaviours of individuals (food or travel avoidance). Fear could be generated by stigma (Delgado, 2023) associated with COVID-19. Thus, we hypothesize the following:

**H2.** Stigma associated with COVID-19 has a significant effect on avoidance of food served at the local level (e.g., Asian restaurants).

**H3.** Food avoidance at the local level has a significant effect on travel intentions to stigmatised countries.

### **Media discourse and stigma**

Individuals have experienced an "extraordinary amount of worry, terror, and panic" as a result of media coverage of the number of COVID-19-related infections and deaths (Zheng et al., 2022). When media talk about COVID-19's health and social effects, they may mistakenly or intentionally create stigma toward persons who have COVID-19 or are suspected of

having COVID-19 (Li et al., 2020). The increasing severity of the COVID-19 pandemic combined with extensive media coverage, has been cited as one factor contributing to people's increased risk perception (Rastegar et al., 2021). Wen et al. (2020) and Zheng et al. (2020) showed how misinformed and biased media discourse on COVID-19 might lead to sinophobia and alleged discrimination against Chinese nationals. In the context of plague pandemics, daily newspaper confirmed that Chinese people are considered health concerns (Barde, 2003). In 2003, the same discourses that blamed the plague on Chinese food and culture reappeared to explain the origin of SARS (Eichelberger, 2007).

Media coverage of the dangers of made-in-China items was favourably associated with risk perceptions and adversely associated with sentiments toward the nation of origin and purchase intentions (Jun et al., 2009). Since COVID-19 was first reported in China, everything Asian was stigmatised across the media. About 2.11% of tweets stated that because the person, product or place are Asian (Chinese restaurant), this person, product or place may be associated with the transmission of COVID-19 (Li et al., 2020). Some studies suggest that media can be useful in overcoming stigma and assisting in the development of effective coping mechanisms (Ramasubramanian and Yadlin-Segal, 2017; Li et al., 2020). Stigmatisation can be reduced by efforts aimed at general education about the disease and the rationale for quarantine, as well as public health information through media discourse (Bruns et al., 2020).

Fung et al. (2014) claimed that "exaggeration or reassurance" from the media can inflame or subdue people's perceived danger of infection sickness, in line with Hoppe (2018) and Ungar's (1998) debates about the influence of media on magnified feelings of anxiety or tranquillity. If we want to oppose and remove stigmatisation, we need to improve the systems that cause and limit it (media discourse) (Noel, 2020). Drawing on the reasoned action approach (Fishbein and Ajzen, 2010), the theory of planned behaviour (Ajzen and Kruglanski, 2019), and cultivation theory (Gerbner, 1998), media could affect viewers beliefs and ultimately behaviours. Considering the arguments, the following hypothesis is proposed:

**H4:** Media discourse has a significant effect on the stigma associated with COVID-19.

## METHODOLOGY

### Procedure and sample

A positivist research philosophy (Elkhwesky, Derhab et al., 2023) was adopted by the authors of the current study. Data were gathered using online-based questionnaires directed to a sample of Egyptian nationals. This method of data collection eliminates the expensive and difficult transfer of forms, data entry, and verification (Elkhwesky, Abuelhassan et al., 2023). The questionnaire was translated by the authors from English to Arabic as the local language to facilitate its understanding by Egyptians. Then, the Arabic language was checked by employing a number of Arabic teachers who confirmed the questionnaire items' compatibility. The final data were collected between May and August 2022. The authors operated a two-stage sampling method. First, purposive sampling was employed to select Egyptians who have the following characteristics. They must be (1) dining out regularly in Asian and Chinese restaurants; these types of themed restaurants are very popular in Egypt (Khalifa, 2015), (2) travelling or were planning to travel to China and Asian countries for tourism before and post COVID-19. Next, snowball sampling was used to acquire data from targeted participants. The online survey was distributed through a Google Docs form with potential participants within professional and social networks which they, in turn, shared with their networks (Mohamed and Al-Azab, 2017; Elkhwesky, Abuelhassan et al., 2023).

The two selected groups are considered informative respondents to the current study for three reasons. First, the spread of the culture of Chinese and Asian food in Egypt, especially among young people, whether through restaurants, supermarkets, or Chinatown in the capital (CGTN Africa, 2018). Second, the desire of a large number of Egyptians travels to China and Asian countries, whether for business or tourism. The number of tourists traveling from the Middle East to China reached about 252,000 in 2018-2019 (UNWTO, 2020), the majority of whom were from Egypt. Third, increasing the number of Chinese people in the Egyptian community in the last ten years reached more than 20,000 belonging to different social classes, religious, ethnic, and professional backgrounds (Farouk, 2017), as well as an increase inbound Chinese and Asian tourists coming to Egypt by 5.2 % of the total number of tourists coming to Egypt in 2019 (Tourism in Figures, 2019). It was discovered that potential tourists' impressions of China and Asian countries as stigmatised places had a significant impact on their intention to visit those countries (Moufakkir, 2013).

For structural equation modelling (SEM), the best recommended sample size is 500 for models with large number of constructs to reduce deviations from normality (Hair et al., 2010: 637). The authors distributed 1000 questionnaires and received 650 completed questionnaires from Egyptians, of which 593 were usable and 57 were counted void because they have not met the inclusion criteria discussed earlier. This sample size is considered to be suitable and representative (95% confidence level and a margin of error of 5%) for research based on a questionnaire (Malhotra et al., 2006).

### Measures

Table 3 indicates the measurement items in detail. Stigma associated with COVID-19 was measured using three items adapted from Wouters et al. (2017). To measure travel intentions to stigmatised countries, two items were used based on Lee et al. (2012). Three items were used to measure food avoidance and they were adapted from Hassen et al. (2021) and Shim and You (2015). Two items were used to measure media discourse from Mutz (1989). All of these items were assessed on a seven-point Likert scale ranging from 1 "strongly disagree" to 7 "strongly agree".

### Statistical analysis

We started by screening data for issues, such as normality, common method bias, and multicollinearity using SPSS v. 27. First, no missing data were found, as all questionnaire items required a sort of response. One case was deleted because it reflected an unengaged response: all questions were answered with the same value of 1 and a low SD of 0.192. The skewness

and kurtosis values were below  $\pm 1$  and  $\pm 2$  respectively, confirming the normal distribution of data (Hair et al., 2013; Hair et al., 2019). After data screening, the main statistical analysis was conducted using such statistical programmes as Stata v. 17. This study applied structural equation modelling (SEM) and followed established guidelines in two steps: measurement model assessment and structural model assessment (Al-Azab and Al-Romeedy, 2023; Elkhwesky et al., 2023; Hair et al., 2013; Hair et al., 2019). PLS-SEM is the preferred prediction method (Evermann and Tate, 2016). By evaluating the whole variance of the observed indicators rather than only the correlations among the indicators, the variance-based PLS-SEM approach, in contrast to covariance-based SEM, primarily focuses on explaining the variance in the dependent variable (Sarstedt et al., 2016). Therefore, PLS-SEM is a causal-predictive approach to SEM that stresses prediction in estimating statistical models whose structures are intended to provide causal explanations (Al-Azab and Abulebda, 2023; Sarstedt et al., 2017).

### Common method bias

The data were obtained from respondents all at once. Thus, three steps were taken to decrease the threat of common method bias (CMB). First, eligibility questions at the beginning of the survey asked customers if they dined out in an Asian or Chinese restaurant in the previous two months and whether they travelled or have the willing to travel to China and Asian countries for tourism before and post COVID-19. Those who had not were excluded from the final analysis. Second, the study's goal and objectives were clearly stated in the introduction, pointing out that there were no right or wrong answers. Finally, Harman's single-factor test was used to check for CMB. The results showed that a single factor explained less than half of the total variance, indicating that CMB was not a concern in this study (Podsakoff et al., 2003). Likewise, the variance inflation factor (VIF) was calculated for each independent variable to check for multicollinearity. All the inner VIF values were below the threshold of 3.3, demonstrating the absence of multicollinearity issues (Kock, 2015: 7).

## RESULTS

### Characteristics of the respondents

As Table 2 shows, most respondents were young between 18-25 years old (53.3%), followed by 26-35 years old (27.2%). Females represented (50.6%) while males (45.9%), most of them married (37.4%). The majority of respondents earn less than LE 2000 (39.6%) per month followed by LE 2000-LE 5000 (33.9%).

Table 2. Characteristics of the respondents (Source: Findings of the current study)

	Total (N = 593)	
	N	%
<b>Gender</b>		
Male	272	45.9
Female	300	50.6
Prefer not to say	21	3.5
<b>Age</b>		
18-25	319	53.3
26-35	161	27.2
36-45	87	14.7
46-55	15	2.5
Above 55	11	1.9
<b>Marital Status</b>		
Single	360	60.7
Married	222	37.4
Others (e.g., divorced)	11	1.8
<b>Income level (month)</b>		
Less than LE 2000	235	39.6
LE 2000 to LE 5000	201	33.9
LE 5001 to LE 10000	86	14.5
LE 10000 – LE 15000	37	6.2
More Than LE 15000	34	5.7
<b>Eating out in Asian restaurants</b>		
Less than 5 times	277	46.7
5-10	158	26.6
More than 10 times	159	26.8

### Measurement model

Factor loadings, composite reliability (CR), Cronbach's alpha ( $\alpha$ ), and average variance extracted (AVE) were calculated to assess the measurement model (Haddoud et al., 2022). As Table 3 shows, all factor loadings exceeded the recommended value of 0.7 (Chin et al., 2008), and each loading was significant on a 1% level ( $p < 0.001$ ). As evidence of internal reliability, the CR values of all constructs exceeded the suggested 0.6 value (Bagozzi and Yi, 1988). Similarly, the Cronbach's alpha ( $\alpha$ ) of all constructs ranged between 0.805 and 0.873. The AVE values are all above 0.50. This means that each construct explains at least 50 percent of the variance of its items (Hair et al., 2019), and so convergent validity was supported. Discriminant validity was also supported by comparing the square root of the AVE for each construct with inter-construct correlations (Fornell and Larcker, 1981). The heterotrait-monotrait (HTMT) ratio of correlations is a new approach that concentrates on the multitrait-multimethod matrix to estimate discriminant validity (Henseler et al., 2015).

The HTMT ratio for the model was less than 0.9, which indicated acceptable discriminant validity (Gold et al., 2001; Riggs et al., 2023) (Table 4). Overall, the measurement model showed an acceptable fit with the data ( $\chi^2$  (chi2\_ms) = 32.766, P = 0.287, CFI (comparative fit index) = 0.999, TLI (Tucker–Lewis index) = 0.998, RMSEA (root mean squared error of approximation) = 0.015; SRMR (standardized root mean squared residual) = 0.019).

Table 3. Measurement model evaluation indices (Source: Findings of the current study)  
Note: CR = composite reliability; AVE = average variance extracted; S.D. = standard deviation

Variables and items	M.	S.D.	Loading	$\alpha$	CR	AVE
<b>Stigma associated with Covid-19</b>				<b>.844</b>	<b>0.861</b>	<b>0.674</b>
Stigma_1: When I see Chinese and Asian people, I feel they probably have COVID-19	3.15	1.87	.710			
Stigma_2: I feel uncomfortable seeing Chinese, and Asian people since the COVID-19 outbreak.	3.41	2.23	.846			
Stigma_3: I am cautious of Chinese, and Asian people even after COVID-19 treatment.	3.56	2.15	.855			
<b>Travel intentions</b>				<b>.805</b>	<b>0.854</b>	<b>0.661</b>
Travel_1: Whenever I have a chance to travel to China and Asian countries, I will	4.17	2.18	.906			
Travel_2: I will do my best to improve my ability to travel to China and Asian countries	3.82	2.00	.746			
<b>Food avoidance ;Since COVID-19 became serious in Egypt,</b>				<b>.873</b>	<b>0.807</b>	<b>0.589</b>
Food_1: I feel anxious when I go to Chinese and Asian restaurants.	3.98	2.18	.837			
Food_2: My perceptions toward Chinese and Asian foods became negative.	4.24	2.19	.854			
Food_3: I am worried that I get sick from eating Chinese and Asian food.	3.79	2.09	.811			
<b>Media discourse</b>				<b>.842</b>	<b>0.883</b>	<b>0.653</b>
Media_1: Media discourse improves my perception of Chinese and Asian food and restaurants (r)	4.35	1.81	.925			
Media_2: Media discourse changes my negative perception towards traveling to China and other Asian countries (r)	4.32	1.82	.786			

Table 4. Assessment of discriminant validity (Source: Findings of the current study) (Note: The HTMT ratio for the model was acceptable if < 0.9)

HTMT ratio	Stigma	Travel intentions	Food avoidance	Media discourse
Stigma	-			
Travel intentions	0.43	-		
Food avoidance	0.75	0.33	-	
Media discourse	0.14	0.08	0.24	-

**Structural model and hypotheses testing**

Table 5 indicates construct cross-validated redundancy (Q<sup>2</sup>). Calculating the Q<sup>2</sup> value is important to assess the PLS path model’s predictive accuracy (Geisser, 1974; Stone, 1974). This metric is based on the blindfolding procedure that removes single points in the data matrix, imputes the removed points with the mean, and estimates the model parameters (Sarstedt et al., 2014). As such, the Q<sup>2</sup> is not therefore a measure of out-of-sample prediction, but rather combines aspects of out-of-sample prediction and in-sample explanatory power (Sarstedt et al., 2017).

Using these estimates as input, the blindfolding procedure predicts the data points that were removed for all variables. Small differences between the predicted and the original values translate into a higher Q<sup>2</sup> value, thereby indicating a higher predictive accuracy. As a guideline, Q<sup>2</sup> values should be larger than zero for a specific endogenous construct to indicate predictive accuracy of the structural model for that construct. As a rule of thumb, Q<sup>2</sup> values higher than 0, 0.25, and 0.5 depict small, medium, and large predictive relevance of the PLS-path model.

Table 5. Construct cross-validated redundancy (Q<sup>2</sup>) (Source: Findings of the current study)  
Note: Threshold/sample reporting based on the guidelines from Hair et al., 2019

Factors	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
Food Avoidance	1779.000	1198.707	0.326
Media Discourse	1186.000	1186.000	0.000
Stigma	1779.000	1763.567	0.009
Travel Intentions	1186.000	1060.009	0.106

The fit indices of the structural model showed an acceptable fit with the data ( $\chi^2$  (chi2\_ms) = 60.000, P = 0.001, CFI = 0.990, TLI = 0.986, RMSEA = 0.040; SRMR = 0.045) (Hair et al., 2019). Following the R<sup>2</sup> of outcome variables, at least 45% of the variance was explained in the main dependent variables. This substantial variance confirms the strong predictive power of the model. The effect size (f<sup>2</sup>) is a measure of the magnitude of an effect that is independent of sample size (Benitez et al., 2019). According to Cohen (1988), values higher than 0.02, 0.15, and 0.35 depict small, medium, and large effect sizes. The effect size values for most links fall between 0.02 and 0.35, thus effect sizes had small to medium powers. The SRMR was below the suggested threshold of 0.080 (Henseler et al., 2014). This indicates an overall acceptable model fit. Taken together, these results suggest that the structural model is well-suited for testing the proposed hypotheses. Next, H1– H4 were tested.

As Table 6 shows, the data supported that stigma associated with COVID-19 has a significant negative effect on travel intentions ( $\beta$  = -0.424, t = -5.73, p<0.001). Thus, H1 is supported. Likewise, stigma associated with COVID-19 has a significant and positive effect on food avoidance ( $\beta$  = 0.740, t = 28.87, p<0.001), thus H2 is supported. Although this study proposed that food avoidance at the local level will be related to travel intentions to stigmatised countries, this link was not

supported ( $\beta = -0.004$ ,  $t = -0.05$ ,  $p = 0.957$ ). Thus, H3 is not supported. Finally, media discourse has a significant and positive impact on the stigma associated with COVID-19 ( $\beta = 0.157$ ,  $t = 3.36$ ,  $p \leq 0.001$ ). Thus, H4 is supported.

Table 6. Structural model evaluation and hypotheses testing results (Source: Findings of the current study) (Note: \*\*\*\* means  $p \leq 0.001$ )

Predictor	Outcome Variable	Estimate	2-tailed t-value	P-value	R2	Decision
H1: Stigma	Travel intentions	-0.424	-5.73	0.000****	0.81	Supported
H2: Stigma	Food avoidance	0.740	28.87	0.000****	0.45	Supported
H3: Food avoidance	Travel intentions	-0.004	-0.05	0.957	.81	Not supported
H4: Media discourse	Stigma	0.157	3.36	0.001****	.97	Supported

## DISCUSSION AND CONCLUSION

Stigma has grown in importance as a concept for understanding consumer behaviour during crises and gaining insights into post-pandemic food and travel intentions. This study collected data from 593 individuals in Egypt to understand their perceptions towards dining at local stigmatised restaurants and travelling to stigmatised countries. The study's results showed that (1) stigma associated with COVID-19 is negatively related to intentions to travel to stigmatised countries, and positively related to stigmatising restaurants on a local level, (2) no significant link between local food avoidance and travel intentions, and (3) media discourse increases stigma associated with COVID-19. Next, these results are discussed, and theoretical and practical implications are underlined.

### Theoretical contribution

First, the results show that media discourse contributes negatively to cultivating the stigma associated with COVID-19. Theoretically, this result supports the background role of media in shaping viewer beliefs. This outcome is consistent with the reasoned action approach (Fishbein and Ajzen, 2010), the theory of planned behaviour (Ajzen and Kruglanski, 2019), and cultivation theory (Gerbner, 1998); where media is positioned as a background variable that informs viewers beliefs and subsequent behaviours. This result implies that media interactions related to COVID-19 contributed to stigmatising certain countries (Carrier, 2022). This result supports previous studies where media discourse contributed to stigmatisation by shaping public debates (Brooks et al., 2020). Although media discourse is claimed to change behaviour (Mayer et al., 2021), the current study finds that even balanced media discourse is difficult to change negative perceptions. This can be explained by the misleading media discourse (Amnesty International, 2020), resulting in explicit discrimination, social exclusion, and stigmatization of Chinese and Asians (Al-Azab et al., 2021, He et al., 2020).

Second, the stigma associated with COVID-19 has devastating effects on the food and travel industries. Theoretically, this result adheres to the protection motivation theory (Rogers, 1975), such that people try to mitigate fear and use various coping methods to avoid infections (Folkman and Lazarus, 1980; Ruan et al., 2020). This finding was backed by the negative link between stigma and travel intentions to stigmatised countries. It supports those of Hasan et al. (2017), where people's impressions of stigmatised individuals and their countries of origin have a significant impact on their willingness to go to those countries. This can be understood given that stigma increases fear of infection and so people try to avoid travel because the most significant considerations in travel selections are safety and health risks (Dolnicar, 2005; Halim et al., 2024).

Third, the results support the negative effect of stigma and food avoidance on local levels where people avoid going to Chinese and Asian restaurants. Yet, local food avoidance due to stigmatised perceptions does not translate to lower consumer travel intentions. This result is not in line with spillover theory, which postulates that consumer behaviour transfers across contexts or time causing a positive or negative spillover effect (Thøgersen and Ölander, 2003). This result can be explained by the difference in time and space across food and travel behaviours; eating out in stigmatised restaurants in one's home country has a short to immediate occurrence compared to travel that has a long-term orientation.

### Practical implications

The results suggest practical insights for local businesses affected by COVID-19. First, because consumers continue to avoid local restaurants stigmatised by COVID-19, restaurateurs may think about updating their menus and flyers to avoid stigmatised words. Second, restaurants should focus on underlying the local sourcing of their ingredients (Aisha et al., 2024; Elkhwesky, 2022). Third, they should concentrate on the safety and hygiene of their staff (Elkhwesky et al., 2021). At the media level, COVID-19-related discrimination should be avoided and a link with the devastating effect of stigmatising local foods and restaurants based on their names (Chinese restaurants) damages local and small businesses and so the country's economy. Media platforms ought to work to enhance awareness (Elkhwesky, Derhab et al., 2023) without raising anxiety. Additionally, they must also warn of negative behaviours and support stigmatised groups (UNICEF, 2020).

They also have a responsibility to highlight inspiring and upbeat stories of those who have overcome the pandemic. Such information will lessen the perception that the illness is terminal and foster greater compassion for patients (Abdelhafiz and Alorabi, 2020). Thus, decreasing stigma and discrimination against particular communities. The significance of sustainability (Amoah et al., 2021; Derhab and Elkhwesky, 2023; Modrak et al., 2011; Wang and Phakdeephairot, 2024) and social responsibility (Castañeda-García et al., 2022; Xu et al., 2020) for the population groups subjected to prejudice and discrimination by the hospitality and tourism sector. The need of educating locals and other key tourism stakeholders, such as visitors and service providers, of the risk of marginalisation, exclusion, and misrepresentation among certain racial or ethnic groups (Jamal and Budke, 2020). Tourists are likely to be satisfied with and travel to socially responsible places or destinations (Saleh, 2023; Su et al., 2020). To minimize COVID-19 stigma, we require more than just information; multi-level initiatives can target the underlying stigma drivers and



facilitators. Understanding how COVID-19 stigma interacts with gender, racism, immigration status, home security, and health status, among other identities, can be improved by utilising an intersectional lens (Stangl et al., 2019). Immediate and long-term measures to foster compassion and social justice during the present and upcoming pandemics can be informed by balancing tensions between stigma reduction and COVID-19 prevention and containment (Logie and Turan, 2020).

### Limitations and future research

This study collected cross-sectional data and tested relationships, yet the causal links between the study relationship are not confirmed. Future studies can apply experimental design and manipulate media discourse and examine their effect on food and travel intentions. For example, an interesting line of studies could focus on the role of exposure to stigmatised comics on social media and their impact on stigma and subsequent travel intentions. In addition, people who engage in sharing and reacting to such comics respond differently than those who do not react. This can contribute to the literature on humor, and link to stigma and consumer behaviour. Another line of research can adopt a qualitative approach to explore the underlying beliefs of consumers and unpack their experiences selecting food and travel destinations before and after COVID-19. We also recommend that future scholars analyse the mediating role of food avoidance at stigmatised restaurants between stigma associated with COVID-19 or other diseases such as the monkeypox virus (Elkhwesky, Derhab et al., 2023) and travel intentions to stigmatised countries.

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