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Exploring home-based accommodation operators' responses to Covid-19: Implications of untact hospitality adoption

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ARTICLE INFO

Keywords:
COVID-19 pandemic
Local home-based accommodations (LHAs)
Risk perception
Untact hospitality
Protection Motivation Theory (PMT)
Iran

ABSTRACT

Unlike the mainstream research conducted on the COVID-19 pandemic and its impacts on both large-scale tourism and hospitality firms, and also at the destination level, the current study focused on home-based accommodations in Iran which have experienced rapid development throughout the country. In-depth interviews with a number (n = 45) of such accommodation operators revealed that due to their perceived high vulnerability to the pandemic and self-protection, they adopted “untact hospitality”, thereby decreasing their direct interaction with guests. Looking through the lens of Protection Motivation Theory, four main themes were explored: motivations to work in the hospitality industry; local accommodation operators' perception of threat; coping appraisal; and protection behavior intention. The results revealed that many local ventures were unable to survive, leading to the bankruptcy of such units throughout the country. With few exceptions, the public sector's responses to the pandemic, and the hospitality sector's measures, were generally unsuccessful in managing the health crisis. The current study contributes to the risk, crisis preparation and crisis management of hospitality organizations at the local level in the context of their health protection motivation behavior.

1. Introduction

The COVID-19 pandemic has devastated the world's travel, tourism, and hospitality industries, causing extraordinary socioeconomic disruption in societies worldwide (Bae and Chang, 2020; UNWTO, 2020). The spread of fear and uncertainty (Wassler and Talarico, 2021) throughout the world's travel markets, partly due to misleading information on social media, ineffective and inconsistent public sector interventions (Collins-Kreiner and Ram, 2020), the fear of the crisis itself (Karl, 2018), and its impact on tourists' perceptions have all resulted in a major decline in travel demand (Wen, Aston, Liu, and Ying, 2020; Zheng, Luo, and Ritchie, 2020). The impacts of this health crisis have been severe for tourism businesses in general, and the hospitality sector in particular has experienced very severe negative effects. Numerous studies have attempted, though few empirically, to investigate the real or potential effects of this pandemic on specific tourism sectors (e.g., Fong, Law, and Ye, 2021; Gossling, Scott, and Hall, 2020; Pappas, 2021; Ugur and Akbiyik, 2020; Yang et al., 2021). These studies have generally confirmed the unprecedented impacts such as consumer preference for private dining facilities (Kim and Lee, 2020), immediate economic loss in many different sectors: cruise lines, hotels, travel agencies, and touristic attractions (Knight, Xiong, Lan, and Gong, 2020), the psychological capital impacts on the operators of budget hotels (Pathak and Joshi, 2020), tourists' perception of risk and intention to travel (Karl, Kock, Ritchie, and Gauss, 2021; Sánchez-Cañizares, Cabeza-Ramírez, Muñoz-Fernández, and Fuentes-García, 2020), travel behaviors of tourists (Shakibaei, De Jong, Alpkökin, and Rashidi, 2021), restaurants firm stock return in the USA (Song, Yeon, and Lee, 2021), impacts on rural tourism in Czechia (Vaisحار and Sřístnα, 2020) and the impacts of misleading media information on public health crisis (Wen et al., 2020). Nevertheless, little attempt has been made to investigate in detail the various impacts of the pandemic on Local Home-based Accommodations (LHAs) and explore their responses to the health crisis. More precisely, while the pandemic led the accommodation providers (LHAOs in our study) and tourists to engage in protective behaviors, surprisingly, previous investigations have focused more on guests' protective behaviors, while hosts' perspective and protective behaviors have remained unexamined in the literature. This is a very important omission because the host interaction with the guest represents an essential element of the tourist experience, particularly in LHAOs (Farmaki et al., 2020).
Farmaki et al. (2020) note that understanding the hosts' perception of a threat and their vulnerabilities is critical to obtaining a deeper insight into their perceptions of the disease's impacts and their related responses. Moreover, self-efficacy and response efficacy of individuals to the pandemic are important in realizing how recommended responses address the threat at hand (Menard, Bott, and Crosnier, 2017).

One of the significant effects that COVID-19 has had on the hospitality sector has been the spread and acceleration of a practice called “untact hospitality”, also known as “untact consumption” and “untact tourism”, caused by the fear of the virus and the need for social distancing (Bae and Chang, 2020, p.2; Bresciai et al., 2021). While past research has discussed the concept of untact mainly from the perspective of modern technology usage and the characteristics of modern people (Lee and Lee, 2020), because of the COVID-19 pandemic, people have begun to practice an untact lifestyle as a self-protective behavior strategy to avoid risk and to pursue safety. This new lifestyle, which is focused on untact or limited encounters with others because of social distancing, is particularly challenging to the hospitality industry in general because of the heavy focus on face-to-face interactions between hosts and guests, encounters underlined as “the moments of truth”, and even more important to enterprises which offer accommodation in the host’s living premises (Bae and Chang, 2020; Sur, 2008).

Using the lens of Protection Motivation Theory (PMT) (Rogers, 1975), and within the context of Iran, the current study aims to understand how Local Home-based Accommodation Operators (LHAOs) have perceived and reacted to Covid-19 and if they have adopted untact hospitality as a self-protection behavior strategy, their reactions and attitudes towards it. We believe that the theoretical lens of PMT is appropriate for this study because it is considered as a value-based theory that explains how beliefs and attitudes of (LHAOs in this study) influence behavioral intentions. Moreover, PMT postulates that two cognitive mediating processes namely, threat appraisal and coping appraisal, predict one's behavioral intention. More specifically, threat appraisal involves a personal assessment of a situation's apparent threat based on perceived severity, perceived vulnerability, and fear arousal. In short, the theory argues that individuals (in our case LHAOs) anticipate performing a health-promoting behavior if they think that behavior will be effective at alleviating a threat, is within their capability to perform the behavior, and if they observe the behavior to be favorable and of reasonable cost (Hanson, Crandall, Barnes, and Novilla, 2021). This can reveal significant insights for local home-based accommodations that have limited resources.

This study contributes to the literature from several perspectives by examining the health behavior intentions and actions of LHAOs during the COVID-19 pandemic. This is necessary in order to expand the present understanding of hospitality operators' health protective behaviors and to contribute to both the hospitality and the public health literature on responses to the Covid 19 pandemic. As tourists (guests) are the main source of accommodation operators' income, determining how guests are treated under the current social distancing restrictions and the hosts' perception of safety are of great importance (Obeldat and Almatarneh, 2020; Park and Tussyadiah, 2020). Second, it is vital to understand how hosts are coping with the pandemic and the situation it has created in the specific context of local hospitality. Third it is necessary to identify what adjustments and changes in behavior have been adopted by LHAOs to combat the pandemic. In that context specifically, it was felt appropriate to investigate whether untact hospitality had been adopted, and if so, if it has affected local hospitality-based ventures and LHAK's attitudes towards the pandemic and host-guest safety issues. Finally, the application of PMT in a health crisis within the context of hospitality organizations contributes to the advancement of knowledge on the crisis preparation and crisis management of LHAOs. As Covid-19 led to the adaptation of social-distance behavior and encouraged consumption of touchless products and services, understanding the response and behavior of LHAOs, when facing the fear of health issues, are important in crisis planning and management as well.

The next sections of this study start with reviewing the literature, describing the methodology, followed by the results, discussions and conclusion and implications.

2. Literature

2.1. Local home-based accommodations, hospitality, and COVID-19 pandemic

Hospitality units at the local level have a very important role in creating unique experiences for tourists and transforming the spirit of hospitality to guests within a specific destination (Mura, 2015; Paulauskaité, Powell, Coca-Stefaniak, and Morrison, 2017). These types of accommodations, particularly in rural areas in Iran, have increased significantly in recent years (Deputy for Tourism, 2020). While these enterprises provide financial and non-financial benefits to their owners specifically, and to society in general (Hassanli, Gross, and Brown, 2016), they also offer numerous benefits to guests including providing convenient places to stay, creating value-for-money opportunities and offering unique local experiences (Farmaki et al., 2020; Tussyadiah, 2016). The term “Local home-based accommodation” (LHA) in this study refers to small lodging properties in rural areas which provide accommodation and catering services based on local lifestyle hospitality (Deputy for Tourism, 2020). Beside their emergence as an alternative to the traditional hospitality sector, LHAs concentrate on offering a unique guest experience of local lifestyle by co-creating their customized services (Kallmuenzer, Peters, and Buhalis, 2020; Meng and Cui, 2020; Schuckert, Peters, and Pilz, 2018). The classification of these accommodations according to the degree of host-guest separation (Hassanli et al., 2016; Lynch and MacWhannell, 2000) specifies differing levels of host-guest interactions, of which experiencing local hospitality is a central feature. In fact, a major reason for choosing LHAs, beside their good value-for-money, can be experiencing local lifestyle and authentic hospitality (Hassanli et al., 2016).

However, those units which are mainly family operated are highly vulnerable to crises of all types including the current COVID-19 pandemic (Dahles and Susilowati, 2015; Eichelberger and Peters, 2021). For example, Farmaki et al. (2020) confirmed that the pandemic has had a significant impact on the activity of peer-to-peer accommodations and that these units were vulnerable to the crisis. In another study, Ghaderi, Mat Som, and Henderson (2012) noted that home-stays in Malaysia were highly susceptible to impacts from, health diseases such as SARS, H1N1 and Dengue Fever. Disconnection from powerful lobbies, limited scope of operation, small market share, financial viability, lack of access to external financing, and little influence compared to larger hospitality firms make these LHAs highly vulnerable to external risks (Jaafar, Maideen, and Sukarno, 2010). Despite its obvious high susceptibility to the effects of the pandemic and its importance to local communities and culture, this sector has been neglected, both officially and academically, as much mainstream research has focused on large-scale hospitality firms and paid only limited attention to LHAs in non-urban areas (Hassanli et al., 2016; Lynch and MacWhannell, 2000). Bresciai et al. (2021) examined how Covid 19 impacted different accommodation types and concluded that assuring physical distance reduced concerns of tourists towards shared accommodation. They noted that to the best of their knowledge, this was “the very first study that measures the variation in the tourists’ accommodation choice due to the pandemic” (p. 12), thus emphasizing the lack of research in this area. Conducting interviews with peer-to-peer accommodation hosts, Farmaki et al. (2020) investigated the impacts of the COVID-19 pandemic on hosting practices, and responses to the pandemic, and found that the pandemic had varying levels of impacts on different hosts. They concluded that, although economic benefits encouraged many accommodation operators to continue hosting via booking platforms in the hope that they would recover from the crisis, they also identified hosts that had decided to leave the platforms and
Tourism and hospitality organizations are increasingly prone to various risks and crises occurring in different corners of the world (Duro, Perez-Laborda, and Turrión-Prats, 2021; Jiang, Ritchie, and Verreyne, 2019; Paraskevas and Quek, 2019; Ritchie and Jiang, 2019). The severity of these crisis events and their susceptibility persuade Destination Marketing Organizations (DMOs) to plan and prepare for potential risks at different levels (Ghaderi, King, and Hall, 2021; Paraskevas and Quek, 2019). Risk is described as a probability that a hazard or danger becomes a disaster that may quickly turn into a crisis if not managed properly (Shaw, 2010). Kerzner (2017) also refers to risk as the lack of knowledge or understanding about unfavorable future incidents that have negative impacts on businesses. Risks, based on their root cause, are categorized into two main groups, internal and external threats, internal referring to the risks that occur within an organization and are potentially controllable, while external risks refer to those happening outside the organizations which have no or limited control upon them (Shaw, 2010). Other types of risks are noted in the literature such as operational, strategic, financial, and reputation risks (Mertzanis and Papastathopoulos, 2021). Operational risk refers to a breakdown or problem in the production process, in providing service to customers, or issues in infrastructure, personnel or leadership problems (Gerald and Lyngstad, 2015; Sadgrove, 2016). Strategic risks deal with problems in the company's strategy such as issues with competitors or customers (Gerald and Lyngstad, 2015). Risks, whether internal or external, must be controlled and managed in a proper way before they are able to disrupt the whole tourism system and create devastating impacts (Paraskevas and Quek, 2019). Tourism and hospitality businesses recognize the importance of managing risks which have detrimental effects on their achievements (Shaw, 2010). However, it is not easy for practitioners to implement a practical strategy in dealing with risk due to the ambiguity, chaotic and uncertainty nature of risks (Aldao, Blasco, Espallargas, and Rubio, 2021).

Regardless of taking different strategies, risks are never exclusively eradicated, because organizations are unable to entirely detect all risks and therefore, most often a minor part of a risk could go unpredicted and unmanaged. These unforeseen risks are named ‘residual risk’ which is defined as a risk that remains after an organization has taken proper precautions (De Salvo, Capitello, Gaudenzi, and Begalli, 2019). In a realistic scenario, residual risk represents the risks that remain after controls are applied and reflects the level of confidence that decision makers have in the implemented risk strategy (Sadgrove, 2016). However, residual, non-efficiently managed and unforeseen risks have the possibility to generate crisis circumstances for an organization and, thus, contingency planning is necessary. Scholars distinguish between crises and disasters. Disasters roots can be attributed to natural causes such as earthquake, floods, tsunami, etc. whereas crises are usually caused by human-induced factors like health-related issues, economic downturn, political unrest and other examples of chaos in a system (Faulkner, 2001; Faulkner and Russell, 1997). In addition, Mitroff (2016) used another classification to discuss the cause and sources of crises such as internal, external, technical, economic, people, social and organizational. He further argued that each crisis sets off a chain reaction leading to other crises. If an organization is not prepared for a series of multiple crises, then it is not crisis prepared. Crisis management is, thus, integral to the advancement of risk treatment strategies and is mostly dealt with by preparation to reactively respond if a crisis emerges by controlling its impact and then recovering quickly. The first stage of crisis response is containment or damage limitation (Mitroff, 2005).

The second stage is business continuity in order to survive and keep core business functions of the organization undisrupted (Ritchie and Campiranon, 2014). The third task of crisis recovery is effective communication of ‘intelligence’ between different stakeholders which is crucial for decision-making. Managing transparent communication lines with all communities is essential, because strategic communication in the case of tourism can reduce the risk perception of tourists and help reshape the destination as safe in the mind of visitors (Barbe and Pennington-Gray, 2018). Thus, response to a crisis is not only about mitigation but also includes a three-pronged process of containment, continuity, and communication.

The next stage in crisis management is crisis resolution, which Mitroff (2005) called business recovery and returning the organization to the status quo (Assaf and Scuderi, 2020). At this stage, as the organization returns to normal, an opportunity could appear for managers to review their actions and apply the lessons learned to prepare for future crises (Filimonau and De Coteau, 2020; Ghaderi et al., 2012). Crisis recovery involves four areas: financial, operational, reputational/image recovery, and consequences’ management (Paraskevas and Quek, 2019). Tourism and hospitality organizations need to recover from the pandemic and prepare their firms for future risks (Fong et al., 2021), in this case, LHAs in collaboration with DMOs need to employ effective strategies to recover from the current crisis and plan for future risks considering the safety and security of both hosts and guests.

Giving the increasing interest of practitioners and academia in tourism crisis and disaster management, many have attempted to better understand crises and disasters based on their causes, nature, and magnitude using different theoretical lenses (Ritchie and Jiang, 2019). Looking at the crises and disasters from different theoretical perspectives creates insightful understanding of ways of managing various crises. For example, chaos and complexity theories have been applied as a lens to understand the complex nature of tourism crises and disasters at different scales (Faulkner and Russell, 1997; Ritchie, Bentley, Koruth, and Wang, 2011; Ritchie and Jiang, 2019). In an attempt to investigate the spatial impacts of the Christchurch earthquakes on the city’s tourism and hospitality spaces in New Zealand, Faisal, Albrecht, and Coetzee (2020) applied an economic geographical perspective and Niche Construction Theory where the theoretical implications address the nature of transformational impacts on the tourism and hospitality spatial landscapes, related entrepreneurial resilience, and the application of these theories in a tourism disaster context. Most recently, Berbekova, Uysal, and Assaf (2021) conducted a thematic analysis of 207 published articles in tourism and hospitality crisis management literature and noted that more than half of the studies (139 out of 207) did not indicate any theoretical underpinnings. Their investigations, however, show that chaos and complexity were the most applied theories, whereas resilience theory, planned behavior theory, prospect theory, random utility theory, social exchange theory, and knowledge management theory were also frequently used. While protection motivation theory has been applied in one study, (Berkokova et al., 2021), its application in this study contributes to the advancement of knowledge in the hospitality crisis and risk management literature. As discussed below, PMT is deemed particularly relevant and suitable to use in the context of responses to COVID-19 because it was developed in the context of reaction to threats to health and how individuals perceived threats and potential remedies.

2.3. Protection motivation theory

PMT was initially proposed to explain the impacts of fear/threat appeals on health attitudes and behaviors (Rogers, 1975). It also explains how individuals cognitively evaluate a particular risk and carry out preventive behaviors (Ployd, Prentice-Dunn, and Rogers, 2000). The theory identifies three fundamental components of a threat appeal: (1) the magnitude and severity of the event; (2) the likelihood of the event's
occurrence; and (3) the efficacy of protective and preventive responses to the event. A basic assumption is that the protection motivation occurs from the cognitive appraisal of the harmful event and its probability to occur, along with the belief that suggested coping responses can effectively thwart the occurrence of the disruptive event (Rogers, 1975).

Threat appraisal includes perceived threat severity and threat vulnerability. Threat severity is an individual’s perceived seriousness of the threat of a particular risk (Menard et al., 2017), while threat susceptibility is a person’s sense of vulnerability from a particular threat (Floyd et al., 2000). The cognitive-mediation process includes people’s perceived threat and perceived efficacy in coping, which evokes their protection motivation and different coping manners (Rogers, 1975). PMT has been used in different disciplines including consumer behavior (Boerman, Kuikmeier, and Zuiderveen Borgesius, 2021; Wang, Liu-Lastres, Ritchie, and Mills, 2019), psychology (Bamberg, Masson, Brewitt, and Nemetschek, 2017) and marketing studies (Chin and Mansour, 2018). While disaster management has attracted considerable attention in the tourism literature (Ritchie and Jiang, 2019; Wu, Xu, and Wong, 2021), PMT does not appear to have been used in this context, and certainly not with respect to Covid 19 and LHAs. Previous studies, within the context of tourism and hospitality, have used this theory to investigate the role of perceived risks and safety as key barriers to leisure tourists to visit a destination (Sie mez and Graefe, 1998), in promoting risk reduction behavior of tourists (Cahyanto, Wiblisheuer, Pennington-Gray, and Schroeder, 2016), in examining tourists’ protective behavior when facing a health threat (Wang et al., 2019), and the threat of air pollution (Ruan, Kang, and Song, 2020; Zheng et al., 2020). Health crises have long been a main concern of hospitality organizations, creating fear and anxiety which have a significant impact on the protective behavior selection (Floyd et al., 2000). The theory also helps to realize the effectiveness of responses from individual operators and the protective behaviors they adopted. Several health-protective behavior theories were developed to explain how protective behaviors are initiated or maintained, including the health belief model (HBM), PMT, the theory of reasoned action (TRA), and subjective expected utility (SEU) theory (Weinstein, 1988).

Although there are more similarities than differences among these theories, the explicit crucial factors integrated in the risk and non-risk variables of each model differ. For instance, while the perceived response effectiveness of taking precautionary action is considered as a significant variable in the HBM and PMT, this is not the case in the other two theories (Floyd et al., 2000), because the individual’s evaluation of response efficacy cannot be determined directly using the TRA and SEU theories. However, a key distinction between the HBM and PMT is the way in which the two are organized (Prentice-Dunn and Rogers, 1986). The HBM is organized as a set of variables contributing to behavior, whereas PMT is organized along two processes that attempt to match the cognitive processes that people use in evaluating threats and in selecting among coping alternatives. PMT is the only one among the four theories that includes self-efficacy as a separate factor. Studies have found that self-efficacy is a significant influencing agent in motivational, cognitive, and affective processes and it has been an important factor in our study as well (Bandura, 1992).

2.4. Untact hospitality

Although the concept of hospitality traditionally has been integrated closely with customer interaction and face-to-face encounters to enhance guest experience (Ghaderi, Hall, Scott, and Beal, 2020), the term “untact” moves the focus to isolation and keeping distances. Untact hospitality is a new phenomenon which hosts can adopt to protect the health and safety of themselves and their guests. As a newly coined term, “untact” initially appeared in the book ‘Trend Korea 2018’, referring to consumption behavior that decreases face-to-face contact (Bae and Chang, 2020). Previous studies (see for example, Buhalis et al., 2019; Chadee, Ren, and Tang, 2021; de Kervenoael, Hasan, Schwob, and Goh, 2020; Kabadayi, Ali, Choi, Joosten, and Lu, 2019) have discussed the concept of untact within the context of customer service strategy in the digital era, emphasizing the unwillingness of modern people to establish unwanted contacts in consuming services (Lee and Lee, 2020). However, the enforced isolation resulting from the imposition of restrictions for health protection from Covid-19 has encouraged the adoption of “untact hospitality” to support the practice of social distancing.

Past research has explored remote service interaction from the viewpoints of digitalized innovation, particularly focusing on mechanized services such as kiosks and self-services, in different areas such as marketing, service industries, technology, tourism, and hospitality (Buhalis et al., 2019; Chadee et al., 2021; de Kervenoael et al., 2020; Kabadayi et al., 2019). Although previous studies discussed the willingness of people to accept limited interaction with the supplier/seller in luxury hotels and restaurants by automatic check-in/out, in-room dining, self-service kiosks and service robots (Awan, Shamim, and Ahn, 2020; Ivanov, Webster, Stoulva, and Slobodskoy, 2020), in this study, untact is the result of instituting enforced isolation to protect one-self (the host) and tourists (the guests) from a lethal pandemic. The COVID-19 pandemic has transformed the hospitality and tourism industry to a “new normal” (Ateljevic, 2020; Huang, Li, and Wen, 2020), in which both hosts and guests are required to adopt a new lifestyle which is appropriate for their health and safety, and there is increasing recognition that “the pandemic is also likely to change tourists’ lifestyles, travel behaviors and patterns” (Wassler and Fan, 2021, p. 3). For instance, Kim, Bonn, and Hall (2021) note that biosecurity behavior of international tourists (prosocial behavior) amid Covid-19 is significant as they may adopt a new lifestyle. We looked at the issue of interaction through the lens of untact hospitality because LHAs have adopted social distance behaviors as a method of self-protection against the Covid-19 pandemic.

3. Method

3.1. Research design

Qualitative research benefits from flexible research design rather than fixed procedures (Maxwell, 2013), indicating any part of a design may need to be re-evaluated or revised during a study in response to new developments or to changes in components. It implies that all activities pertaining to data collection and analysis, theory development and modification, explaining or refocusing the research questions, and addressing validity issues are usually all occurring more or less simultaneously, each influencing all of the others (Maxwell, 2013; Walker, 1985). However, since there is no specific framework on how LHAs responded to the Covid-19 pandemic, to ensure their safety and protection against the virus while running their businesses, this study responded to the Covid-19 pandemic, to ensure their safety and protection against the virus while running their businesses, this study adopted a social constructivist approach that discovered numerous realities formed by tangible and intangible mental constructions of LHAs who experienced the health pandemic and were able to discuss their responses to the crisis and to propose insights to be considered in managing future health crises (Paraskevias, Altinay, McLean, and Cooper, 2013). Lincoln and Guba (1985) argued that it is through these constructions that respondents understand the world and their behaviors are derived from the basis that these constructions form. To meaningfully investigate the issue in question, an interview protocol was prepared (Table 1) to guide the research (Robinson, 2014). The interview questions (See Appendix A, research instrument) were derived from previous studies on COVID-19 (for example, Bae and Chang, 2020; Farmaki et al., 2020; Gossling et al., 2020; Zheng et al., 2020) as well as through the lens of PMT.

3.2. Study context

The context of this research is LHAs in rural areas across different provinces in Iran. We chose Iran because it is one of the most Covid-19
affected countries in the world, and at the time of writing (May 2021) there were 2,893,218 confirmed cases and 79,741 confirmed deaths (WHO, 2021). The spread of COVID-19 in Iran has exacerbated pressures on a country already trying to cope with the impacts of economic sanctions, including those on tourism and hospitality, which had been one of the better performing sectors in the country's economy (Ghaderi, Soltani, Henderson, and Zareei, 2018).

According to the Ministry of Culture, Handicrafts and Tourism, there are 2,201 accommodations of this type across the country; Kerman province with 295 units has the most, followed by Eastern Azerbaijan with 201, and Isfahan 178, while Qom with only one accommodation had the lowest number (Deputy for Tourism, 2020) (See Fig. 1). The rapid increase of LHAs in Iran was in response to the increasing desire of tourists to experience local Iranian culture, the rural lifestyle, and a unique community-based experience (Hassanli et al., 2016), focused on diversified tourism and hospitality products, and the hosts’ interest in conserving their traditions, local customs, and natural heritage (Ghaderi and Henderson, 2012). In terms of host-guest separation, these lodgings can be classified into three categories: 1) accommodation where the owner resides on the same premises and public spaces are shared with guests; 2) accommodation where the owner and his/her family reside on the premises but public spaces for the guests are separated from those of the family; and, c) self-catering lodgings, where the owner resides off the property and the unit is usually a second home (Lynch and MacWhannel, 2000; Lynch, McIntosh, and Tucker, 2009; Hassanli et al., 2020). While the first and second categories promise a high level of host-guest interactions, the third group generally provides fewer encounters.

In terms of ownership and operational style, three main categories can be determined: The first group consists of those operators who have lived in the village/region for many years and have established accommodation units for both economic and non-economic benefits. These operators are mostly farmers/villagers, and their families help them in this business. The second group are those operators who had emigrated (mainly to urban areas), but have since returned to their communities and set up home-based lodgings. The third group are those operators who do not originate in the region, but are passionate about the local culture and natural heritage and have established premises as hospitality businesses (Deputy for Tourism, 2020). They can be considered as local cultural ambassadors (Hassanli et al., 2016), and our research shows that the majority, both owners or managers, are young

### Table 1

| Interview questions | Source of interview questions |
|---------------------|-----------------------------|
| Please explain your reasons/motivations to establish your accommodation and work in the hospitality industry. | Farmaki et al., 2020 |
| How do you usually attract business? Do you have collaboration with online booking platforms? Explain your reservation system. | Gossling et al., 2020 |
| How has the COVID-19 pandemic impacted your business? Please explain how you responded to the crisis? | Zhong et al., 2020; Gossling et al., 2020, Farmaki et al., 2020 and PMT |
| How would you evaluate your responses? Do you think that your actions have successfully addressed the problem (Self-efficacy)? | Zheng et al., 2020; Bae and Chang, 2020 and PMT |
| What actions or measures have been taken to protect you, your employees and your guests? | Farmaki et al., 2020 and PMT |
| How do you meet with guests during the pandemic? Please explain if social distance affected your encounter. | PMT, Bae and Chang, 2020 |
| Did your responses cause you extra expense? Do you believe this was reasonable? | PMT & Gossling et al., 2020 |
| How did the government and other responsible agencies help in managing the COVID-19 pandemic? Did you find their measures acceptable? | PMT |
| How do you evaluate the government responses to the crisis? | Gossling et al., 2020 |
| Please explain your plans for recovery and the post-COVID 19 new normal. | |

![Local home-based accommodation distribution across the country](image-url)
people who are very committed to the local culture and their main purpose is economic gain while preserving that culture (Deputy for Tourism, 2020). These establishments offer varying hospitality services from self-service catering to full-service hospitality, including bed & breakfast, local meals, folklore performances, storytelling, and outdoor sightseeing.

3.3. Sample and data collection

In line with the focus of the research, an interpretive and qualitative approach was taken. In-depth semi-structured interviews with LHAOs were conducted. Interviews were conducted online via Skype, WhatsApp and Zoom from early August to December 2020. Respondents were contacted by applying purposive and snow-ball sampling methods to identify the most knowledgeable people to respond to questions (Browne, 2005). The criteria for inclusion were considered to best reflect the selection of the most relevant respondents: (a) being an accommodation owner or operator, (b) being a registered accommodation under the category of the Ministry of tourism (because there are many unlicensed home-based accommodations especially in well-known tourist destinations, but their precise numbers are not available), and (c) being an active unit (more than half of these accommodations were not active during the pandemic). Those accommodations which were not active and not officially registered in the list of the Ministry of Tourism were excluded. The first respondent interviewed would be an individual who was in charge of an LHA network and subsequent respondents were contacted using snowball or chain sampling (Browne, 2005). To obtain respondents from across Iran, 80 operators representing every province/region (15 regions, 32 provinces) were invited to participate in the research. For those who accepted to participate in the research, a consent letter was sent to them to officially confirm their participation (See Appendix B). The list of the aforementioned accommodation was taken from Deputy of Tourism, the Ministry of Culture, Handicrafts and Tourism. A cover letter indicating the purpose of the planned research was sent to over 80 potential respondents to participate in the research, 40 operators responded and were recorded in a matrix (Browne, 2005). Forty-five respondents (56% response rate) were willingly to be interviewed, of which details can be found in Table 2. Others were either reluctant to be interviewed or closed down their properties during the pandemic. Semi-structured interviews were conducted online, and 45 respondents participated in the survey and answered the questions. Each interview lasted between 35 and 75 min, and all were tape recorded with previous permission. The interviews were conducted in Persian and then materials were translated into English for analysis. The translation accuracy was controlled by three semi-native English translators to ensure accurate and consistent meaning.

3.4. Data analysis

Researchers initially checked all transcribed materials for content accuracy before importing data into Atlas.ti software (Version 8) for analysis. Thematic analysis was used because it has been considered as a foundational method for qualitative analysis (Braun and Clarke, 2006). We used “theoretical-drive” thematic analysis in this study, focusing on the PMT to identify key themes relevant to the issues in question in more details and depth (Robinson, 2014). Previous studies have applied this theory only from the demand side (tourists), and no study has applied this theory from the perspective of LHAOs. Thus, the current study fills this gap. We used PMT as the theoretical foundation to understand how LHAOs attempted to protect themselves from the COVID-19 pandemic and the role of untact hospitality in that response (See Fig. 2).

The data analysis process was undertaken in four pre-defined and systematic stages: the first was data transcription and familiarization (Braun and Clarke, 2006). All verbal data were transcribed verbatim, and translated from Persian to English. The principal researcher undertook and managed all interviews, and conducted a “re-reading” or “repeated reading” process up to four times before starting the coding process. Re-reading transcribed materials accelerates the process of placing concepts and the associations between them (Mehmetoglu and Altimay, 2006). During this phase, the other researchers took notes and marked ideas for coding to return to in subsequent phases. The second stage in the coding process was to search for interesting features of data and organize them into meaningful groups (Tuckett, 2005). In the process of coding, interview materials were searched extensively for similarities and differences related to the themes and subthemes. Recurring words, the ideas represented, and any emotions evoking from respondents were coded and recorded in a matrix (Walters., 2016). Open coding was used for all data sets and a significant number of codes were identified. At this stage, group coding was performed to combine and categorize each set of relevant codes into overarching themes, and the relevant coded data extracts collated within the identified themes (Braun and Clarke, 2006). The third stage involved reviewing themes, and renaming the group themes. The final stage included conclusion, extraction, and report write up.

In order to determine the reliability of data analysis, we first ensured interpretative and evaluative rigor or “inter-rater reliability”, which “refers to using a type of researcher triangulation by which multiple researchers are involved in the analytical process” (Kritto, Chesters, and Tuckett, 2005).

Fig. 2. Protection Motivation Theory within the context of this study. Source: Adapted and amended for the purpose of this study from Rogers (1975).

| Province           | No. of respondents | Gender |
|--------------------|--------------------|--------|
|                    |                    | F      | M      |
| Kerman             | 4                  | 1      | 3      |
| Kurdistan          | 4                  | 2      | 2      |
| Semnan             | 3                  | 1      | 2      |
| Kermanah           | 3                  | 1      | 2      |
| Gilan              | 3                  | 2      | 1      |
| Isfahan            | 3                  | 1      | 2      |
| East Azerbaijan    | 3                  | 1      | 2      |
| Khorasan Razavi    | 4                  | 1      | 3      |
| Mazandaran         | 3                  | 2      | 1      |
| Yazd               | 2                  | 1      | 1      |
| Fars               | 4                  | 2      | 2      |
| Golestan           | 3                  | 1      | 2      |
| Hormozgan          | 3                  | 0      | 3      |
| Zanjan             | 2                  | 0      | 2      |
| Qazvin             | 1                  | 0      | 1      |
| Total              | 45                 | 16     | 29     |
Grbich, 2008, p. 244). In addition to participant validation of the gathered data, other researchers were asked to read and compare the transcripts through investigator triangulation (Golfashani, 2003) in order to minimize researcher bias (Farmaki et al., 2020), and the inter-reliability between the researchers was 88%. Member checking or respondent validation was also applied, by offering the respondents the opportunity to view and amend their transcripts as a type of validity (Kitto et al., 2008). Once the verbal communications were transcribed, they were sent back to respondents for their final check to confirm the validity of the transcripts. Only a few interviewees made minor amendments to their previously viewpoints.

To ensure that the ethical and political aspects of the research were addressed, evaluative rigor was used (Kitto et al., 2008). Respondents were asked for their consent and ethics approval involved confidentiality, informed consent and appropriate steps to avoid possible adverse effects on the subjects.

4. Results and discussion

This section of the paper is subdivided into four basic parts, reflecting key themes and responses, beginning with motivations of the respondents for engaging in hospitality, followed by their perceptions of the threat posed by Covid 19, their coping appraisal, and finally their protection behavior intentions. The four main themes were identified and thematic networks were created, linking the relationships between each theme and relevant codes. We used PMT as a lens to interpret our analyses. The theory includes threat appraisal, coping appraisal (self-efficacy, response efficacy, and response costs), and protection behavior intention as key elements that would help in interpretation and presentation of the data.

4.1. Motivations to work in the hospitality businesses

Investigating the local host motivations is important because it provides the background from which to understand differences between host perceptions and behaviors, how operators viewed COVID-19 impacts, and their responses (Farmaki et al., 2020). Respondents asserted that the main motives to operate LHAs were creating employment opportunities for their family and other locals (25%), earning economic benefits (40%), and conserving their local culture, rural lifestyle, natural heritage, and rural development through tourism (35%) (Fig. 3). However, these motives reflected different priorities between operations which have usually been run by “lifestyle entrepreneurs” (Lynch et al., 2009, p. 8) that is, businesses not run for purely entrepreneurial and financial motives. For example, most operators who had migrated from urban to rural areas to establish and operate such accommodations (about 40%) mentioned social interaction and conservation of local culture and natural heritage as the main motivations; whereas economic benefits and job opportunities were the main motivations of those LHAOs who had lived in the region for a long time. For many operators (65%) their establishment was their first and only business venture (Lynch et al., 2009). In this regard, one respondent (R 21) asserted “I have no income other than this accommodation... This is the main source of my income by providing catering and accommodation services to guests”. In addition, some opened their businesses in order to live in a specific location, some to have more personal control, and some as a type of semi-retirement. One accommodation operator (R 31) said “Before retirement, I always was thinking about what to do after I become retired, when it happened, I came to this place, bought this property and renovated it as traditional accommodation. I said to myself, this is the best thing for me to do and encounter with people from different cultures”. The results indicate that unlike large-scale hospitality businesses, financial gain was not the only motivation of LHAOs to work in the hospitality sector. Other factors such as conservation of cultural and natural heritage, local lifestyle, and interaction with other culture were among principal motives, and it is worth noting that those involved for personal motives did not act differently when dealing with Covid-19.

Fig. 3. Motivations to work in the hospitality businesses.
4.2. Perception of the threat (threat appraisal)

Respondents were asked to elaborate how severe the COVID-19 threat appeared to them and the extent to which they considered themselves vulnerable to the pandemic. Understanding the hosts’ perception of the threat and their vulnerabilities was critical to obtaining a deeper insight into their perceptions of the disease’s impacts and their related responses (Farmaki et al., 2020). Nearly all (90%) of LHAOs acknowledged that the new pandemic was a catastrophe for their business, and in addition to the economic losses; it had created fear and uncertainty over their health and public safety (Fig. 4) (Zheng et al., 2020). Not surprisingly, almost nearly all (88%) respondents indicated that they had lost on average 60%-80% of their income between early March 2020 and July 2020 compared to that period the previous year. Their businesses slowly started to recover from mid-July to October, reflecting the lifting of restrictions and a reduction in the numbers of affected people in the country.

However, the rapid spread of the virus, particularly through travel, a lack of effective medicine or vaccines (during the data collection period no vaccines had been officially approved by WHO) to combat the disease (Gössling et al., 2020), and most importantly, the widespread news of a global pandemic (Yu, Li, Yu, He, and Zhou, 2020) accelerated fear and anxiety among LHAOs. Some respondents (30%) argued that the panic generated by the pandemic created a scenario that full recovery would not be attainable at least for two years. In that sense, respondents evaluated the severity of the threat as extraordinary and their vulnerability to the pandemic as very high if they continued to host customers. In explaining the effects of the pandemic on individuals and society, one respondent (R12) noted “This disease acts like a chain, we have severely been affected by the pandemic, it’s not comparable with any other health crises, no one can claim that the effects limit to him, but the whole society will be in serious danger”.

As the transmission of the virus through humans and objects is very rapid and the virus has appeared in different forms and conditions, most respondents felt themselves very susceptible to the disease, seeing it as very likely that they would come into contact with infected guests or other locals. Wassler and Talarico (2021) suggested in their study that risk perception of residents of tourist areas could lead to hostility towards tourists because of the danger of infection from visitors. Respondents admitted that although they complied with health protocols, some of them (25%) had been infected with the virus due to their contacts with possible carriers. A person explained (A09) “Due to the type of work and the high level of contact with people and guests, we are among the most vulnerable to the Corona virus... all our family members working in this accommodation were infected”.

Respondents, while enumerating the special characteristics of the hospitality industry that require a close and friendly relationship with the guests, saw themselves and their staff as the groups most vulnerable to the disease. This finding is consistent with previous studies, namely that hospitality workers are excessively vulnerable in such a crisis, even when working in established workplaces and long-standing businesses (Brouder et al., 2020; Sönmez, Apostolopoulos, Lemke, Hsieh, and Jersey, 2020).

4.3. Coping appraisal

In coping appraisal, we examined the self-efficacy in dealing with the pandemic, and response efficacy and response costs in protecting the safety and security of hosts and their guests. We asked respondents to describe their coping strategies and to evaluate the effectiveness of their responses.

To protect themselves and their guests, most LHAOs had implemented strategies to overcome or mitigate the effects of this crisis (Fig. 5). These strategies included temporary closures, accepting guests with a maximum observance of health and safety arrangements such as disinfection, and maintenance of distance and social distancing. In responding to questions about the effectiveness of the preventive responses in managing the pandemic (Zheng et al., 2020), respondents were doubtful about the effectiveness of those strategies to overcome the crisis. While, the majority (65%) believed that the efforts to keep themselves safe from the COVID-19 pandemic were effective, they still believed that they could more effectively counteract the risk if transparent information was available at the outset of the pandemic. For example, one respondent (R 28) said, “In order to control this disease in the current situation, the best thing we did was to fully comply with the health protocols and social distancing, which I believe we have been successful so far, but we could do much more if there was transparent information.”

4.3.1. Self-efficacy

Self-efficacy is the confidence an individual acquires in effectively implementing a recommended response (Menard et al., 2017). Respondents were asked to explain how confident they were in the efficacy of their responses in protecting both host and guests from the virus while doing business. Interviewees identified two main sources of response
measures they had to implement: the general health protocol imposed by the government (such as social and physical distancing, lockdown in red and orange situations, and wearing masks) and more specific measures recommended by the business sector (including cleaning and disinfection after each guest, preparing the room for the next guest, guest fever control, and untouched facilities). Non-compliance with both sets of criteria and measures could result in forfeit and business closure. Informants explained that though taking measures to prevent COVID-19 infection was uncomplicated (there were specific procedures to follow), they had limited skills, budget, and equipment to protect themselves, their staff and properties, as noted elsewhere (Buckley, Zhong, and Martin, 2021; Zheng et al., 2020). Most respondents (60%) acknowledged that they did their best to protect both themselves (as hosts) and guests, and that they considered the measures they performed were adequate. One respondent (R 27) noted “As a small actor in the hospitality business, we did what we could to protect ourselves and our guests, and I think it was more than enough from us......, but maybe tourists think the opposite; but, it was our maximum capacity”. In evaluating their self-efficacy, some respondents pointed to the application of their local knowledge and traditional Iranian medicine in treating the pandemic. Interestingly, other studies had found that Chinese citizens had applied interventions involving traditional Chinese medicine which had also shown promising results in treating COVID-19 (Wen et al., 2020; Xu and Zhang, 2020). While the effectiveness of traditional Iranian medicine in the treatment of COVID-19 has not been approved yet, some of the respondents claimed that it was helpful in several cases. One respondent reaffirmed:

I used traditional Iranian medicine, and I can strongly say that it was quite effective; I always use medicinal herbal teas in catering guests and I think it’s the right thing to do. At least it’s not harmful.

Most respondents had learned how to apply preventive measures to protect themselves. They spoke of a high capability and appropriate learning capacity due to easy access to scientific resources, daily news, and medical knowledge. Another interviewee (R14) discussed.

Due to our interest and high learning capacity, we collected a book of preventive measures and applied them in protecting ourselves. For example, all our employees have obtained training on COVID-19 safety and sanitation standards with more inclusive training for those staff with frequent contacts with guests such as housekeeping, front office and food and beverage, departments.

As the above discussion informed, it can be concluded that the overall response was a perceived reasonably high level of self-efficacy.

4.3.2. Response efficacy

Response efficacy refers to an individual’s perception of how well a recommended response addresses the threat at hand (Menard et al., 2017). We, therefore, asked respondents to explain how effectively the responses used addressed the problem. Answers to this inquiry were diverse and at some points contradictory. The majority of respondents (85%) believed that measures to slow the rate of infection such as imposed travel restrictions, quarantine, and social and physical distancing as recommended by the government were either not implemented appropriately or were ineffective in addressing the threat and preventing the further diffusion of disease. Respondents believed that
the government’s prevention policies and responses were contradictory: on one hand, they applied quarantines and called for social distancing, but on the other hand, they allowed religious ceremonies and political gatherings, which created the ground for further spread of the virus. An interviewee (R 32) said “In my view, public sector’s measures and prevention plans were ineffective, not only these responses did not protect us from the risk of infection, but they also intensified the second and third waves of disease”.

While few respondents (almost 20%) said that the efforts and available measures to protect and keep people safe from the pandemic threats and infections were adequate, they accused both locals and travelers of endangering themselves and society by their noncompliance with the health protocols and new hygiene and safety standards (Sigala, 2020). A respondent stated “I think what the government has applied as responses to the pandemic was correct, other countries did the same, but people and tourists do not wish to comply with these protocols; it is not the government fault” (R 29).

LHAOs had differing views regarding the suitability of measures taken in protecting their staff, business and property. They critically questioned a lack of support from tourism authorities in the form of both financial and non-financial assistance. They felt that the general measures performed by the business sector were insufficient and ineffective in ensuring their survival. For example, respondents explained that to survive, they had to lay off a number of employees and temporarily close due to the governments’ lock-down response to the pandemic (Benjamin, Dillette, and Alderman, 2020; Loi, Lei, and Lourenço, 2020), and also that promises by the Deputy for Tourism to assist local accommodations were not fulfilled.

4.3.3. Response costs

Response costs relate to the perceived extrinsic or intrinsic personal costs of performing the suggested adaptive behavior (Menard et al., 2017). An individual may interpret response costs in a number of ways, including time, money, and effort. Previous studies confirmed that response costs increase if the severity and perceived vulnerability of the crisis are too high (Wang et al., 2019). Respondents elaborated that the response costs to the COVID-19 crisis had been significant. These included both financial and non-financial costs associated with implementing different response strategies. For example, one respondent (R17) said “Implementing health protocols and standards has created significant overhead costs for us. This happens in a situation that our incomes have dropped dramatically”.

A considerable part of the response cost for protection includes the purchase of personal safety equipment and sanitation supplies such as masks and gloves, sanitizer, sanitizing wipes, and hygienic detergents. Other costs included enforced lockdown, and general operating costs.

4.4. Protection behavior intention

Respondents were asked what specific behaviors they had taken to protect themselves and their employees against the COVID-19 pandemic. Analysis of the research findings shows that a range of different behaviors and protective measures had been adopted to safeguard themselves, employees, and guests from the disease (Fig. 6). One of the most important behaviors adopted by the majority of respondents (70%) was “untact hospitality” or minimizing physical contacts with their guests. COVID-19 has transformed hospitality to a new normal, by adapting an “untact hospitality culture” for the safety and protection of both guests and hosts (Awan et al., 2020; Bae and Chang, 2020). While most respondents (almost 80%) supported the application of “untact hospitality”, they found it alien for hospitality businesses. Informants stated that although they fully respected physical and social distancing to protect themselves, their families and the community, they were worried that untact measures may affect tourist decisions, reduce the quality of services offered and decrease customer satisfaction. Untact hospitality not only changed the host-guest relationship, but has also reduced the interactions between guests. For instance, one respondent (R 42) said:

Not only we had to minimize our contact with our guests, but we also had to make arrangements to keep the distance between the guests. For example, we set up chairs and dining tables in cafes and restaurants at a recommended distance of 2m, use private amenities at accommodations so that our guests feel safety.

This is particularly important because a “warm spirit of hospitality” is fundamental to destination sustainability and its competitiveness (Tung, Tse, and Chan, 2021). A hospitable spirit from local hosts can encourage visitation and increase interactions between hosts and guests, and many destinations worldwide often ascribe their success to being a tourist-friendly environment (Lin, Chen, and Filieri, 2017). However, with the COVID-19 pandemic, negative host-guest relations have become a major concern as there is an increasing number of reports of hosts’ discontentment and tensions with tourists (Shahabi Sorman, 2017). Moreover, as the results indicate, the interaction between guests was minimized, thus reducing the socialization between them. Socialization between guests and hosts can encourage intergroup relationships, and during socialization, the courtesy and politeness of hosts may help build
or strengthen new relationships with tourists (Nadeau, Heslop, O'Reilly, and Luk, 2008; Tung et al., 2021).

Another issue was check-in and entry prohibition of those guests who did not comply with health protocols. LHAOs explained if they encountered unmasked guests they would most probably refuse to accept and check-in them. One respondent (R38) explained “Those who willingly throw caution to the wind, disregarding health protocols for stopping (or coralling) COVID-19, will be unwelcomed. We respect for not only our safety, but to other guests as well”.

Such a comment supports the findings of Wassler and Fan (2021) with respect to the fact that the pandemic was liable to cause changes in tourist behaviors and patterns (Kim et al., 2021), and in some cases, the necessary changes such as wearing masks would not always be complied with.

5. Conclusion and implications

As noted in the Introduction, there had been little research on the effects of the COVID-19 pandemic on accommodation operators and how they had responded in terms of changes in behavior and operation. The primary objective of this study was to explore this gap in the literature and contribute to knowledge about how individual small-scale operators had attempted to maintain their livelihoods through the pandemic and the measure they had taken. In this study, therefore, we examined the attitudes and behavior of LHAOs in rural Iran in order to understand the effects of the COVID-19 pandemic on their hospitality business, and to record their health protection behavior, including the adoption of untact hospitality. PMT was applied as a lens to direct the analysis and discussion and proved to be an appropriate and relevant approach to use in this context. Our primary conclusion is that LHAOs clearly perceived the Covid-19 pandemic as a most affective and devastating crisis and applied various measures and strategies to protect both themselves and their guests from the lethal pandemic. The adoption of untact hospitality was widespread among respondents, with over 70% using this approach. In this context it is clear that while they followed some of the steps in the PMT model, in general their concerns have not been resolved, partly because of what is perceived as an incomplete response by the public sector in terms of support provided, and because, as noted below, considerable concern remains as to how untact hospitality may negatively affect tourism to their operations in the future. As well, several other conclusions were derived from our findings.

First, the negative perceptions of the virus, its severity and the response costs were extremely high, which led to major disruption in the operation of LHA. This resulted in prolonging business recovery. Thus, LHAOs took major steps to protect themselves, their families, and staff from infection and further negative impacts. As was discussed in the previous sections, the effects of the pandemic have been equally significant for LHA in terms of both economic and psychological repercussions as the crisis created the feeling of fear, confusion, uncertainty, and general panic that beset residents. Second, although the majority of respondents believed that the strategies used by the government, the hotel business sector and LHAOs were effective in controlling the disease generally, they felt that the inconsistency of government policies in the incomplete implementation of protocols had reduced the efficacy of responses. There is, therefore, a perception of a mismatch between local personal application of mitigation and control measures implemented at the individual operator level and a national and regional failure to contain and reduce infection across the country. Third, protection behavior intentions were based primarily on social distancing and untact hospitality. However, this change of behavior resulted in concerns about possible dissatisfaction of guests, and that the lack of the normal close relationship between hosts and guests could also reduce their loyalty and their intention to visit or re-visit. Such measures also detract from the traditional hospitality offered in pre-Covid times and deny visitors the chance to experience the local culture which was a key part of both the motivation of LHAOs and an attraction for visitors. Protection motivation behaviors should be incorporated in the new models of hosts and guests’ interaction in the post-Covid era in order to restructure relationships which have been tarnished during the crisis. The final conclusion derived from the results was the lack of transparent information in crisis communication. Lack of effective communication among the industry stakeholders led to the spread of fear and uncertainties, increased the response costs, and delayed the business recovery. Crisis communication and dissemination of transparent information should be incorporated in the crisis practice of LHAOs, in line with arguments discussed in Section 2.2. and as noted in more detail below.

5.1. Theoretical implications

The study has several theoretical implications. While the association between hospitality and health crises has been investigated elsewhere (Henderson, 2004; Kim, Chun, and Lee, 2005; Leung and Lam, 2004), this research is one of only a few to examine the specific impacts of the pandemic on LHA and identify the perspectives of operators towards the pandemic and the introduction of untact hospitality. One of the main attractions of LHA enterprises has been personal contact between hosts and guests and exposure to local culture, and this was shown to be one of the motivations of operators as well. The adoption of untact hospitality threatens this connection and warrants further investigation, particularly if the practice is continued in the future in the post-Covid era. While this study shed some light on this issue through the perspective of PMT, future research could explore this new service culture among hospitality businesses, its challenges and investigate the nature of these interactions through the lens of other relevant theories such as social exchange theory and planned behavior theory.

Examining both host and guest perceptions towards the new hospitality culture would enhance the theoretical side of host-guest relations which are likely to remain changed for some time in the future, perhaps permanently, as a result of the pandemic. In this respect, research on the attitudes and acceptance of different practices by guests is clearly needed to balance these findings on the behavior of operators and broaden knowledge about the implications and effects of the adoption of untact hospitality practices.

In addition, the application of PMT within the context of tourism and hospitality provided theoretical insights in an era when self-protection measures were being applied, encouraging untact hospitality. Two of the three fundamental components of PMT (Rogers, 1975) were examined here, the perceptions of the magnitude and severity of the pandemic and the efficacy of protective/preventive measures. In the case of the Covid pandemic, the likelihood of occurrence was rendered irrelevant because of the widespread nature of the pandemic in Iran at the time of the study. In the context of threat appraisal, it was clear that the level of this was high among operators and most felt vulnerable to the specific threat of contracting Covid 19, and thus they participated fully in adopting coping measures (Rogers, 1975). As noted above, one of these measures was the adoption of untact hospitality for the hosts safety, and this study represents the first time that PMT has been utilized in that context.

Finally, from the hospitality risk and crisis management perspective, this study highlighted the significance of risk and crisis management for LHA at local and national level, integrating PMT and crisis management theories. Critically reflecting on lessons learned and response strategies applied in managing the pandemic crisis could lead LHAOs to better prepare themselves for future uncertainties. Chaos and complexity theories could be integrated with health-related theories such as PMT, TRA (theory of reasoned action), health belief model (HBM) and subjected expected utility theory (SEU).
5.2. Practical implications

The study also has practical implications for LHAOs and tourism authorities at both the national and local levels. For example, we found that local hospitality businesses (from economic and health perspectives) were highly vulnerable to the pandemic crisis, suffering dramatic adverse impacts. However, they had very limited, and in many cases no, financial resources available to counteract or alleviate these negative effects. Unlike large-scale hospitality firms, which may have access to sufficient financial and non-fiscal resources, these LHAos were highly dependent on their daily income, with limited or no cash flow in uncertain situations (Ritchie et al., 2011). Thus, any serious threat, such as the COVID-19 pandemic, can endanger their survival, to such extent that many units in different parts of the country have gone bankrupt or have completely or partially closed their activities. This should alert the public sector of the need to be flexible and responsive and to pay particular attention to these local business ventures, to support them, and to reconsider current local and national tourism development policies that have tended to ignore them (Wut et al., 2021).

The experience of this crisis demonstrated that the government's support policies, crisis planning, and official management practices for LHAos' ventures have been ineffective in such a situation as the Covid-19 pandemic. As Berbekova et al. (2021) note, the pandemic has shown that there is a need to concentrate on the process of risk and planning aspects of crisis management to improve preparedness and reduce uncertainty in local communities. In practice, no crisis preparation or planning was in place at the local and regional levels; thus, LHAos had to respond reactively (Ghaderi et al., 2021), exposing their businesses to high risk. It is recommended, therefore, that authorities should acknowledge the key role of these stakeholders when considering wider hospitality crisis management at different levels, in order to help prepare them for future crises. They should also stimulate a culture of crisis preparedness among all hospitality businesses to prepare for future uncertainties. Equally, regional, and national agencies and ministries should ensure consistency in the application of preventative and mitigation measures to deal with such events as pandemics, because requiring action at an individual level while ignoring the need for action at regional and national levels fails to deal adequately or fairly with the problem.

Another important implication relates to the behavioral intention of LHAos towards untact hospitality. As hosts, they were unhappy with the application of untact hospitality (believing that this concept is contrary to their intentions and motivations to operate hospitality businesses) and felt that this would result in a cooling of the relationship between hosts and guests, distorting the traditional spirit of Iranian hospitality (Ghaderi and Béal, 2020). A mutual understanding between hosts and guests should be developed to ensure that these untact interactions are transitory, and have been performed during the pandemic only, for increasing their safety and protection. Further research into the wider acceptance of the concept of untact hospitality is needed in a broader range of settings, for example, to explore if similar issues arise in more cosmopolitan and urban settings where local traditions have mostly disappeared.

Lack of cooperation and proper communication between the networks of LHAos in effectively managing the pandemic was another issue that needs to be considered by stakeholders involved in the hospitality sector, especially LHAos. Establishing collaborative networks to manage knowledge at the provincial and national levels would be one recommended solution, as the knowledge gap makes these operators more vulnerable in crises, particularly when compared to large scale international operators.

Finally, this study revealed that a small hospitality sector (LHAos) has been affected by a severe and large-scale health crisis (Covid-19), creating tremendous impacts on the operation of these units. While they are relying on daily bookings with limited resources, DMOs can connect them to larger booking platforms such as Hotelyar, Snaptrip, Eghamat24, at the national level, and Booking.com, TripAdvisor, etc. at the international level to diversify their distribution channels for fast recovery. They also could be a part of a wider grouping of crisis management stakeholders to prepare themselves for future uncertainties.

5.3. Research limitations

This research has limitations which need to be acknowledged. First, it focused on the perspectives of a relatively small group of LHAos towards the effects of the pandemic and the adoption of untact hospitality. Second, while our study was conducted within the context of Iran, a country which has faced multiple crises (economic, political, and health) and is a culturally and geographically specific case, future investigations might focus on the impacts of the pandemic in other local and national cultural contexts, both urban and rural, which might provide different results. Finally, while measures were applied to avoid or limit any potential social desirability such as reminding participants about the confidentiality of their interviews, indirect questioning, probing for more information, requesting stories and examples, etc. the authors acknowledge the possible social desirability bias in this research (Ghaderi et al., 2020).

Author contribution

Zahed Ghaderi and Luc Béal conceived and designed the research project with the former organising data collection. Zahed wrote the initial manuscript and Richard Butler wrote and revised the manuscript at different stages in conjunction with Zahed.
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