Online customer reviews about security and its impact on hostel prices: the importance of human rights

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Abstract: Based on a sample of consumer reviews of 637 hostels in 28 cities worldwide, with different levels of respect of human rights, we test if the security attribute has an impact on the price, depending on the level of respect for human rights. We chose a sample of countries with different levels of fulfilment of human rights by the fact that previous studies show that human rights violation has far more severe impacts on tourism activity than terrorist events. Results suggest that hostel guests are willing to pay a higher price in the countries with serious human rights violations, for a hostel room with higher levels of security. In the case of women and older guests, the premium they are willing to pay is higher. Results also show that as the institutionalised tourists, the backpackers are averse to risk and equally concerned about the risks of travel and destination.

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1   Introduction

Safety, tranquillity and peace are a necessary condition for prosperous tourism, and security has been identified as one of the five global forces that will drive the tourism industry in the new millennium. Numerous studies have demonstrated that tourism destinations are profoundly affected by security perceptions and safety and risk management. In this study, based on theoretical models and empirical evidence, we confirm the importance of destination and accommodation security in the choice process and that this should be seen as a strategic issue, not only by tourism destinations managers but also by hospitality managers.

Numerous studies demonstrate that tourist destinations are strongly affected by security perceptions and safety and risk management. Most of these studies focus on the four major risk factors: terrorism, war and political instability, health concerns and crime (Lepp and Gibson, 2003). Surprisingly, the importance of human rights for the tourism industry has been largely neglected by these studies. However, it has been shown that human rights violations have far more severe impacts on tourism activity than terrorist events (Neumayer, 2004). One of the exceptions is the study of Saha et al. (2017). This study reveals that a decrease in all human freedoms would make a destination less attractive to tourists. Countries with serious human rights violations are inherently riskier countries to visit and only provide a limited range of tourism services due to a lack of economic freedom.

The main objective of this study is to contribute to the debate on how the risk-perception affects tourists' decision to travel and the effect of safety and security attributes in tourism flows and hospitality companies. Tourists are viewed as rational customers who must allocate their income between various goods, which include tourist trips. Alteration in travel risks, arising from increased tourist incidents will increase relative prices as perceived by the customers, given that the customer will lose time in risk analysis and will increase expenditure on protection. Any increase in human rights violations risks in a given country that places tourists at higher perceived risk would induce a standard substitution effect, as well as a generalisation effect.

In this paper, we aim to fill the research gap by studying the impact that online reviews placed by hostel customers in Hostelworld website have in terms of hostel's price premium and absolute price using the hedonic price method. More specifically, given that countries with serious human rights violations are inherently riskier countries to visit, we empirically examine the impact of security and demographic factors (such gender and age) in terms of hostel's price premium and absolute price. To this end, we collect data of consumer reviews of 637 hostels in 28 cities worldwide (the majority are capitals), with different human rights ranking positions in the 2016-Human Freedom Index. We estimate a hedonic price function that includes the security, location and cleanliness attributes together with another set of variables that previous literature has linked with hostels' room price. The security attribute is studied simultaneously with cleanliness and location attributes given that customers' perceptions of hostel security are primarily determined by the cleanliness of the establishment, followed by location (see Amblee, 2015).

In the literature, there is a long debate about the perception of risk by backpackers. Elsrud (2001) claimed that backpackers are adventurous tourists that have a lower perception of the perceived risk. On the other hand, Larsen et al. (2011) revealed that contrary to their expectations, backpackers are not more prone to risk, but rather equally

concerned about the risks of travel and destination. If backpackers are equally concerned about the risk, it is to be expected that when they travel to countries with serious human rights violations, they seek accommodation that offers security. In this way, there will tend to be greater demand for hostels that offer a higher level of security and consequently, a higher price charged by them (see Enz, 2009; Cró and Martins, 2017). Moreover, according to Barker et al. (2002) and Boakye (2010), hostel guests are usually exposed to higher risk than customers of other types of accommodation, given the high incidence of crime in hostels and their common location outside the touristic area. If backpackers are adventurous tourists, it is to be expected that the security attribute does not have a different impact on prices of hostels in countries that do not respect human rights, when compared to those located in countries that respect human rights.

Consequently, in this paper, we will test whether backpackers are willing to pay a higher premium in terms of price for hostels located in countries with serious human rights violations comparatively to countries that respect human rights if the hostel offers a high level of security. Additionally, according to the so-called vulnerability hypothesis (Ferraro, 1995), women and older adults tend to feel more vulnerable and report higher levels of fear of violent acts than young and male customers. Therefore, we will also test whether female and older customers are willing to pay a higher price premium than males and young hostel guests, respectively, for a hostel with a higher security level in countries with serious human rights violations.

The innovative contribution of this study to the literature is the analysis of the impact of the security attribute in the price premium paid by tourists in hostels, based on the hedonic pricing method for countries with different levels of respect for human rights. Since countries with serious human rights violations are inherently riskier countries (according to Neumayer, 2004, these countries are riskier than countries that suffered terrorist attacks), we try to understand if the hostels with a high level of security benefit from a higher price premium. Our study focuses exclusively on hostels for two reasons: (i) because it is the type of accommodation with a higher level of crime (see Barker et al., 2002; Boakye, 2010); (ii) and the fact that the security attribute is only collected and disclosed on Hostelworld's website.

The theoretical contributions and the practical implications of the present study are of various order. The main theoretical contribution concerns the measurement of the influence of the security attribute in the price of hostels, filling a gap in the literature in this regard. With regards to practical implications, results suggest that hospitality managers should provide their guests higher levels of real and perceived security, as this will be not only ethically right as it will have a positive impact on the company's profitability. These actions are particularly needed in countries that disrespect human rights. In addition to security measures, hostels should improve their marketing communication. Safer hostels should take advantage of this. Finally, there should be a growing concern about the personal and economic freedoms by the authorities of countries with a poor reputation in terms of human rights. Concerns about security should lead many hostel owners and managers to place security devices or to allocate areas/floors for specific types of guests – female and older customers. In a highly competitive environment, countries and managers that do not reduce the perceived risk to customers and do not implement communicational marketing tools will lose market share.

The rest of the article is organised as follows. The next section presents the literature review followed by a data and method description, results and managerial and theoretical implications. In the final section, the conclusions are presented.

2   Literature review

2.1   Theoretical foundation of study

Decision-making models (customers and tourist) and theories of risky decision-making comprise the foundation of this study. Several paradigms of decision-making were integrated, then adjusted, to reflect decisions involving human rights violations risks. Expected utility theory is based on individuals' expectation of the overall usefulness of a prospect, its promise to increase existing resources, and their aversion to risk (Kahneman and Tversky, 1979). Its inadequacy as a descriptive model of choice under risk has inspired the development of other theories, such as protection motivation theory (Rogers, 1975), information integration theory (Anderson, 1981, 1982) and prospect theory (Kahneman and Tversky, 1979). These three theories provide theoretical support for this study.

Prospect theory proposes that risky decision-making occurs in two stages: prospects are narrowed down to several alternatives and evaluated before the best option is selected (those considered undesirable are eliminated). When the theory is applied to touristic decisions involving human rights violations risk, prospects are represented by potential destinations. The two-stage process involves evaluating destination alternatives according to safety against threats of human rights violations before choosing one and eliminating risky others. According to the theory, individuals' perceptions of risk influence the attractiveness of prospects being evaluated. Choices involving gains indicate a risk-averse personality, whereas choices involving losses indicate risk-seeking behaviour. Risk-averse individuals (i.e., psychocentric) are likely to choose destinations perceived as safe.

In contrast, risk seekers (i.e., allocentric) are likely to show less concern about choosing destinations based on safety factors. The "framing effect", which occurs primarily in situations with time constraints and causes equivalent outcomes to appear as gains or losses, introduced the concept of "context" in which decision-makers evaluate alternatives. Because the framing effect generates a more extreme response to possible losses than that to possible gains, potential tourists are likely to choose the less dangerous option. Exposure to media coverage and negative word-of-mouth regarding human rights violation threat can create the framing effect by causing one of two equally safe or dangerous destinations to appear safer or more dangerous than the other.

Information Integration Theory (IIT) was developed to explain the risk element in consumer decisions (Anderson, 1981, 1982), but it can also be applied to decisions involving human rights violation risks. Anderson proposed that consumers form psychophysical and value judgments according to complex decision-making steps that include needs awareness, information search, evaluation of alternatives and choice. Psychophysical judgements refer to subjective perceptions of physical reality (similar to potential tourists' attitudes toward a destination). Value judgements refer to the way consumers rank products or services by their attributes to form an overall image (in the process of forming a destination image, tourists may rank different destinations by

weighing costs and benefits). Impressions, evaluations and judgments already formed of the products or services (or destinations) under consideration may change if additional alternatives are added to the evaluation (an acquaintance might recommend a destination not previously considered). The evaluation may also change based on new information acquired (such as recent human rights violations at, or near, the destination being considered). The same when new information acquired, before the final choice, changes consumers' perceptions of an alternative (media coverage of human rights violations at the chosen destination). The chain of events which could take place between the time of booking a vacation and the behavioural outcome of the decision process can extend IIT beyond the point of the final choice. If potential tourists obtain new and negative information about a destination (after it has been chosen), it is likely for these individuals to integrate that knowledge into the decision process, even if it means altering the outcome by cancelling plans.

Protection motivation theory (Rogers, 1975) focuses on three cognitive processes individuals experience in a risky decision process (i.e., appraising threat intensity, considering the probability of occurrence, believing in the efficacy of coping response). According to this theory, the likelihood of engaging in protective behaviour, such as risk avoidance, is related to the degree in which available information suggests the magnitude of the danger, the probability of its occurrence, and how decision-makers are capable of controlling consequences.

Together, these three theories imply that future travel behaviour may be influenced by images of safety and risk that individuals have of regions or may have developed from a past travel experience. Future travel behaviour can thus serve as risk avoidance (or "protection motivation").

Concerning theories of international management, we can fit this study within the scope of the 'institutional distance' theory. Institutional distance theory is focused on the effects of the differences between home and host countries. In the words of Xu and Shenkar, (2002, p.614) "*from an institutional perspective, firms will refrain from investing in markets that are institutionally distant, because business activities in those markets require conformity to institutional rules and norms that conflict with those of the home country*". According to Saha et al. (2017), it might seem obvious that decreases in all freedoms would make a destination less attractive for risk-conscious tourists. Tourists might fear falling foul of an arbitrary, corrupt and ineffectual law enforcement/judicial system because there are no institutions (such as free press and independent judiciary) to defend their civil liberties. In the absence of institutions that guarantee individual freedoms, the obvious consequence is the lack of investment. Scott (1995) defined 'institutional distance' as the extent to which the regulative, cognitive and normative institutions of two countries differ from one another. In this framework, the regulatory component reflects the existing laws and rules that promote certain types of behaviour in a given country. The cognitive element reflects commonly shared social knowledge and practices. Finally, the normative pillar consists of beliefs, values and norms that define the legitimate and expected actions in a society. The core of his argument is that measuring the 'distance' between two countries on each of these institutional dimensions, and estimating their effect on the ability of a firm to transfer business practices and people between contexts, can help multinational corporations with market entry and to obtain legitimacy in foreign countries.

2.2 Impact of human rights in the tourism industry

Numerous studies demonstrate that tourist destinations are strongly affected by security perceptions and safety and risk management (see, e.g., Sönmez and Graefe, 1998; Pizam and Smith 2000; Boakye, 2012; Cró et al., 2020). The questions of security obviously could affect the international tourism flows, as has been demonstrated by several studies carried out in different parts of the world (e.g., Enders et al., 1992; Pizam and Mansfeld, 1996; Bonham et al., 2006; Saha and Yap, 2014; Liu and Pratt, 2017; Ghaderi et al., 2017). Seabra et al. (2013) showed that the tourist's risk perception about their safety has a significant impact on tourism demand, where unsafe destinations will have difficulties in attracting tourists.

Surprisingly, as emphasised by Saha et al. (2017), only very few empirical studies have looked into the influence of human rights on tourism activity. Most of the studies focus on the four major risk factors: terrorism; war and political instability; health concerns and crime (Lepp and Gibson, 2003). However, Neumayer (2004) showed that human rights violation has far more severe impacts on tourism activity than terrorist events. The author found that a substantial increase in terrorist events lowers tourist arrivals by 8.8%; however, a substantial increase in human rights violations reduces tourist arrivals by 32%. These results lead the author to point out that it is necessary "*a better understanding of why human rights violations deter tourism so strongly*" (p.278).

In this regard, although some authors include in their empirical analyses variables related to violation of human rights (e.g., Das and Dirienzo, 2009; Gholipour et al., 2014; Su and Lin, 2014), only recently a theoretical explanation of the impact of human rights' violation on the flow of tourists came up with the study of Saha et al. (2017). According to the authors, it might seem obvious that decreases in all freedoms would make a destination less attractive to tourists. On the one hand, risk-conscious tourists tend to avoid visiting dictatorships and illiberal democracies[1] that are inherently riskier countries to visit. Tourists might fear falling foul of an arbitrary, corrupt, and ineffectual law enforcement/judicial system because there are no institutions (such as free press and independent judiciary) to defend their civil liberties. On the other hand, the lack of economic freedom has the potential to negatively impact on the tourist experience, since economic freedom allows entrepreneurs to provide a broad range of tourist services.

Additionally, Lovelock (2008) explores the ethics of selling tourism products for destinations that have known major human rights issues. He states that travel agents have some reluctance to sell tourism products for destinations with human rights violations. Finally, Callaway and Harrelson-Stephens (2006) showed that there is a close link between human rights violations and terrorist activities. According to the authors, the countries which deny subsistence rights along with civil and political rights create an environment that is conducive to the development of terrorism.

The importance given to the issue of security by the tourist who visits a country with serious human rights problems and chooses a hostel for accommodation depends on several factors. For instance, it depends on their attitude and experience in terms of international travel, their degree of familiarity with the destination, level of risk perception, nationality, age, gender and education (Sönmez and Graefe, 1998; Lepp and Gibson, 2003; Feickert et al., 2006, Rittichainuwat and Chakraborty, 2009, George, 2010). According to the so-called vulnerability hypothesis (Ferraro, 1995), the older adults, women, people of low socioeconomic status, and ethnic minorities are the groups that tend to feel more vulnerable and report higher levels of fear of violent acts. Although the target costumers of the hostels, is essentially a young public (between 18 years and

24 years), recently there has been an increased adhesion by tourists over 30 years, which in the literature are called "flashpackers" (see Hannam and Diekmann, 2010; Paris, 2012). The flashpackers are "*the former backpackers who are now older … stays in a variety of accommodation depending on location, has greater disposable income, visits more 'off the beaten track' locations, carries a laptop, or at least a 'flash drive' and a mobile phone, but who engages with the mainstream backpacker culture*" (Hannam and Diekmann, 2010, p.2). Paris (2012) in his study compares behavioural differences between flashpackers and non-flashpackers groups, and he concludes that "*flashpackers are generally older with more financial security allowing them to pay for more comfort and security*" (p.1103). Finally, in the literature, there is a long debate about the perception of risk by backpackers. Elsrud (2001) and Lepp and Gibson (2003) argued that non-institutionalised tourists (including backpackers) have a different perception of risk from mass tourists, given that backpackers are adventurous tourists and have a lower perception of the perceived risk.

On the other hand, recent studies show that differences in risk perception are fading (see, e.g., Reichel et al., 2007 and Larsen et al., 2011). These authors demonstrate in their studies that backpackers tend to present a global risk perception relatively similar to the perceptions of mass and individual tourists. The authors emphasise that unlike the expected, backpackers are not more prone to risk, but rather equally concerned about the risks of travel and destination.

2.3   Human rights indicators

According to Green (2001, p.1065) "*a human rights indicator is a piece of information used in measuring the extent to which a legal right is being fulfilled or enjoyed in a given situation.*" It turns out that the comparative quantitative assessment of human rights is hampered by the length of the list of internationally recognised rights (Donnelly, 2019). Rosga and Satterthwaite (2009) emphasise that legal protections are tremendously difficult to measure. Doing so requires the creation of benchmarks, careful legal thinking, and complex frameworks. Because this does not translate well into cross-national and quantitative indicators, scholars overtime stopped trying to collect such data for or analyse these kinds of rights (e.g., Rosga and Satterthwaite, 2009). Additionally, given that the construction of indicators is itself a function of the law, these tend to change when the law changes. In the words of Rosga and Satterthwaite (2009, p.266) "*where data are available, they will often be extremely difficult and expensive to obtain and are likely to be fragmentary, controversial, or of dubious reliability*". Consequently, the field of human rights indicators is not a coherent one, and there remain several areas in which there is no theoretical consensus (Green, 2001, p.1096).

Donnelly (2019) still considered a "shortlist" of ten rights grouped into four categories, which must be present in the comparative quantitative analysis of human rights. One is 'Survival Rights' which guarantee individual existence (rights to life, food and health care). Another is 'Membership Rights' which assure one an equal place in society (family rights and the prohibition of discrimination). A third one is 'Protection Rights' which protects the individual against abuses of power by the state (rights to *habeas corpus* and an independent judiciary). Finally, 'Empowerment Rights' that allows the individual to have control of his or her life, and in particular, control over (not merely control against) the state (rights to education, a free press and freedom of association). This list, however, does not imply a hierarchy of rights, but rather an interdependence between all human rights. Survival rights are no more, and no less, basic or important

than empowerment rights. Donnelly (2019), however, points out that rights can only be enjoyed if the individual is alive so that the right to life despite not having moral priority is a prerequisite for the enjoyment of other rights. Finally, these ten rights are not necessarily more important than other human rights not included in this shortlist. For example, the authors argue that the right to family, to a free press and freedom of association. However, they may constitute good proxies of the right to religion, does not imply that they are of higher moral value.

Gupta et al. (1994) argued that despite the numerous studies in which data are collected on various indicators of human rights, they fail to allocate weights to these indicators, and thus produce neither a composite indicator nor a group classification of countries according to their overall levels of performance.

In this regard, Green (2001, p.1082) stated that, even occasionally, in the context of human rights, country classification scales based on expertise and technical judgments are used. Among the indexes most used in human rights studies are the following four: (i) Freedom House Democracy Index[2]; (ii) the Human Freedom Index[3]; (iii) Human Index[4] and (iv) Physical Quality of Life Index[5] (Green, 2001). However, as Green (2001) pointed out, it should be noted that these indices always involve the choice of a limited number of specific indicators, which are assigned various weights, and which tend to reflect the concerns of their compilers instead of the neutral interpretation of its value. On the other hand, when the methodology for constructing the index is not entirely transparent, it runs the risk of creating analysis biases (case of the Freedom House Democracy Index) (Green, 2001, p.1082).

In summary, the Human Index is not available, the Physical Quality of Life Index was constructed essentially for the measurement of the quality of life and the level of well-being of the countries, and the Freedom House Democracy Index only considers human rights related to political and civil rights. In the present study, the list of countries analysed will be based on the Human Freedom Index, not only for the reasons set out, but also because it considers a wide range of individual and economic freedoms. The index incorporates 79 indicators of personal and economic freedom in the following areas: (i) the rule of law; (ii) movement; (iii) security and safety; (iv) religion; (v) association, assembly and civil society; (vi) expression and information; (vii) identity and relationships; (viii) legal system and property rights; (ix) freedom to trade internationally; (x) regulation of credit, labour and business; (xi) size of government and (xii) access to sound money, and as such more indicated in the comparative quantitative analysis of human rights.

2.4   *Importance of online reviews*

The influence of online reviews is particularly important in the case of experience goods, such as hostel or hotel services, where its quality is unknown before consumption (Klein, 1998). In the case of the service provided by a hotel or hostel, as stated by Torres et al. (2015), the customer cannot see the product/service live (though he/she might view pictures), touch, smell, feel or try the accommodation before visiting. Therefore, it is natural for customers to seek other customers' opinions before buying hospitality goods. Thus, electronic Word-of-Mouth (eWOM) plays a pivotal role in this sector (Litvin et al., 2008), where customers tend not to book accommodation without seeking online reviews (Kim et al., 2010). As noted by Ye et al. (2011), online reviews have become one of the most important information sources in customers' lodging decision making. They are used considerably to inform customers of accommodation quality.

The efficacy of online reviews in the tourism and hospitality industry is well-established. Reviews have been shown to influence customers' purchasing decisions (e.g., Bansal and Voyer, 2000; Vermeulen and Seegers, 2009; Zhao et al., 2015), customer satisfaction and their revisit intentions (e.g., Berezina et al., 2012), sales (e.g., Ye et al., 2009, 2011; Öğut and Taş, 2012), and profitability of establishments, measured for example through RevPAR (Xie et al., 2014; Blal and Sturman, 2014).

2.5 Hedonic pricing theory

Hedonic pricing models assume that all products can be decomposed into several attributes which are implicitly valued by the market and added to the final price of the product (Rosen, 1974). Thus, the price p of a night in a hostel room (or for any other product or service) can be described by the hedonic function $p = f(x_1, x_2, \ldots, x_k)$, where x_i represents the amount or level of attribute i (e.g., location of hostel or service quality), $i = 1, 2, \ldots, k$. The term k represents the number of attributes of the product/service that are valued by the market. Once the function f is estimated (or known), the implicit price of the attributes (p_i) can be obtained by mathematical derivation of the hedonic function, that is, $p_i = \partial p \,|\, \partial x_i$, $i = 1, 2, \ldots, k$.

This approach has undoubted empirical advantages, such as the little information required to estimate it, as it is not necessary to know the characteristics or preferences of the costumers involved in the market. Finally, the results provide information about the structure of average customer preferences (e.g., Peña et al. 2016).

Several studies applied hedonic pricing methods to the accommodation sector, due to the heterogeneity of hotel products and services (see Peña et al., 2016 and Cró and Martins, 2017 on the main hedonic price studies carried out in this sector). Every hotel/hostel has a different location and offers different services and amenities; therefore, there are many factors to be considered when determining the right pricing. The majority of hedonic price studies has focused on hotels, where Australia, Europe and North America were the most frequently studied destinations.

2.6 Research hypotheses

We consider the following two research hypotheses:

Hypothesis 1: The coefficients linked to security attribute (as well as location and cleanliness attributes) have a stronger effect on hostel prices located in countries with serious human rights violations.

Given that countries with serious human rights violations are inherently riskier countries to visit (e.g., Callaway and Harrelson-Stephens, 2006 and Saha et al., 2017), as explained above, it is expected that there is a greater propensity on the part of potential hostel customers to pay a higher premium in terms of price in hostels that offer high-security standards and located in countries with serious human rights violations if backpackers are averse to risk, such as the institutionalised tourists. If backpackers are adventurous tourists, it is to be expected that the security attribute does not have a different impact on prices comparatively to countries that respect human rights. Finally, the empirical research performed by Amblee (2015) shows that guests' perceptions of hostel security are primarily determined by the cleanliness of the lodging, followed by the location. The

author emphasises that "*cleanliness and security tend to go hand-in-hand, because a clean facility implies control and organisation and hence security*" (p.37). The empirical model takes these results into account.

Hypothesis 2: The female and contemporary tourism backpacker are willing to pay a higher premium in terms of price for a hostel with high levels of security in countries with serious human rights violations comparatively to countries that respect human rights.

As highlighted by Hecht and Martin (2006, p.70) "*most of the recent research suggest that the backpacker market is made up of two sub segments: (i) the youth tourism backpacker – between 15 and 29 years; and (ii) the contemporary tourism backpacker – 30 years and older (Loker-Murphy and Pearce, 1995)*". As noted by Hecht and Martin (2006), the youth tourism backpacker is viewed as more a social and cultural experience than the contemporary backpacker. The young backpackers view hostels as an experience rather than a form of accommodation. The opposite happens with the contemporary backpackers (which includes the flashpackers). The latter value the issue of comfort and security. Additionally, according to the vulnerability hypothesis, female and older customers are the group that tends to be more fearful of being victimised (Ferraro, 1995). This fear tends to be higher in countries with serious human rights violations where the premium in terms of price paid by hostel customers for a hostel with high levels of security tends to be greater than in the countries that respect human rights.

3 Data and method

3.1 Data

To test the hypotheses, we use a database of prices, hostel characteristics and consumer reviews, collected from the website Hostelworld[6] for April 2018, for 637 hostels located in 28 world cities (the majority are capitals) with different levels of respect for human rights according to 2016-Human Freedom Index. In the case of Switzerland, Canada, Australia, Myanmar, Belize and the UAE the data used relates not to the capital but to its most populous cities: Zurich, Toronto, Sydney, Yangon, Belize City and Dubai, respectively.[7] As indicated in the literature review section, the Human Freedom Index presents the state of human freedom in the world based on a broad measure that encompasses personal, civil, and economic freedom. On a scale of 0 to 10, where 10 represents more freedom, the 159 countries analysed by the 2016-Human Freedom Index are ranked according to the "Freedom Index" that is not more than the average of two sub-indices: the "Personal Freedom Index" and the "Economic Freedom Index". Initially, our sample was composed by the 15 countries ranked in the top of Freedom Index (approximately, the top 10% ranked countries) – the countries with the greatest respect for the fulfilment of human rights. Given that there is no supply of hostels in Hostelworld website for Luxembourg (country ranked in 11th position), the final number of countries analysed that respect human rights were 14 countries. To have a balanced panel of countries, we also collect data from the 14 countries with the worst score.[8] In sum, our sample is composed of all the hostels located in the 28 cities analysed, for which there is the necessary information to estimate the empirical model. The sample distribution of hostels by country is shown in Table 1.

Table 1   Sample distribution of hostels

Most Freedom Countries	H.F.I.	#	Least Freedom Countries	H.F.I.	#
Hong Kong (Hong Kong City)	9.06	30	Iran (Tehran)	4.63	9
Switzerland (Zurich)	8.83	3	Myanmar (Yangon)	4.94	19
New Zealand (Wellington)	8.67	12	Egypt (Cairo)	5.31	17
Ireland (Dublin)	8.64	27	Ethiopia (Addis Ababa)	5.53	4
Denmark (Copenhagen)	8.62	9	China (Beijing)	5.63	22
Canada (Toronto)	8.61	8	Belize (Belize City)	5.80	7
UK (London)	8.61	75	Morocco (Rabat)	6.09	24
Australia (Sydney)	8.61	58	Sri Lanka (Colombo)	6.10	23
Finland (Helsinki)	8.55	6	Vietnam (Hanoi)	6.12	61
Netherlands (Amsterdam)	8.54	30	Azerbaijan (Baku)	6.12	6
Austria (Vienna)	8.53	16	U.A.E. (Dubai)	6.36	7
Germany (Berlin)	8.49	65	Malaysia (Kuala Lumpur)	6.39	38
Norway (Oslo)	8.49	5	Russia (Moscow)	6.39	15
Sweden (Stockholm)	8.42	25	Ukraine (Kiev)	6.41	17

Notes: This table presents the sample distribution of hostels by the country's capital. After the name of the country and its capital, comes the value of the 2016 Human Freedom Index (H.F.I.) for the country as well as the number of hostels located in the capital (#). In the case of Switzerland, Canada, Australia, Myanmar, Belize and the UAE have been used data relating not to the capital but its most populous cities: Zurich, Toronto, Sydney, Yangon, Belize City and Dubai, respectively. The index values range from 0 to 10, where 10 represents more freedom country.

For the dependent variable (hostel price), in the case of hostels offering only one type of accommodation (dormitories or private rooms), a single price was recorded. For those offering dormitories and private rooms, the average of both prices was calculated and considered in the analysis. Hereafter, referred to as "absolute price". Regarding price variations related to different dates, the minimum available price for April 2018 as was recorded, as in Santos (2016) and Cró and Martins (2017). Given that we are interested in the hostel' price premium (or relative price), we calculate the difference between the absolute price of each hostel located in a city and the average price of hostels in the same city. The hostel' price premium (in EUR) for each hostel and the absolute price are the final dependent variables of the model. Table 2 presents descriptive statistics.

Table 2   Descriptive statistics

Variable	Mean	Standard deviation	Minimum	Maximum	Skewness	Kurtosis
		PANEL A (268 observations)				
Price Premium	19.107	11.693	–22.220	336.545	3.597	21.784
Absolute Price	28.410	51.986	4.000	259.275	10.864	14.756
Security	8.767	1.022	3.000	10.000	–1.583	6.932
Location	8.938	0.920	4.000	10.000	–2.122	9.877
Cleanliness	8.993	1.328	2.000	10.000	–1.207	4.894
Atmosphere	7.917	1.247	2.000	10.000	–0.937	4.504
Facilities	8.034	1.250	2.000	10.000	–1.507	6.760
Staff	8.581	1.015	5.000	10.000	–1.246	4.437

Table 2 Descriptive statistics (continued)

Variable	Mean	Standard deviation	Minimum	Maximum	Skewness	Kurtosis
PANEL A (268 observations)						
Number Reviews	402.37	815.20	2	6,871	4.527	28.391
Variance Rating	1.185	0.677	0.000	3.332	0.537	−8.032
Dormitories	0.196	0.398	0	1	1.530	3.339
Private Rooms	0.170	0.377	0	1	1.754	4.075
Breakfast	0.567	0.496	0	1	−0.269	1.072
WiFi	0.985	0.121	0	1	−2.032	26.551
Age ≥ 30	0.337	0.474	0	1	0.689	1.475
Female	0.311	0.464	0	1	0.816	1.666
Hostel Award	0.007	0.086	0	1	1.149	1.330
PANEL B (369 observations)						
Price Premium	31.818	44.431	−28.150	213.375	1.558	5.638
Absolute Price	65.091	44.805	9.295	255.015	1.639	5.798
Security	8.297	1.210	2.000	10.000	−1.374	5.397
Location	8.493	1.177	2.000	10.000	−1.903	8.199
Cleanliness	7.753	1.501	2.000	10.000	−0.936	3.661
Atmosphere	7.547	1.169	2.000	10.000	−1.075	4.887
Facilities	7.504	1.274	2.000	10.000	−1.054	4.657
Staff	8.161	1.031	2.000	10.000	−1.374	6.639
Number Reviews	2,058.41	64.02	5	19,688	2.577	11.582
Variance Rating	1.436	0.553	0.000	2.844	−0.081	2.615
Dormitories	0.179	0.384	0	1	1.667	3.781
Private Rooms	0.114	0.318	0	1	2.431	6.914
Breakfast	0.271	0.445	0	1	1.030	2.062
WiFi	0.957	0.204	0	1	−4.484	21.107
Contemp	0.312	0.464	0	1	0.813	1.661
Female	0.306	0.462	0	1	0.841	1.707
Hostel Award	0.133	0.339	0	1	2.164	5.683

Notes: This table shows the descriptive statistics (mean, standard deviation, minimum, maximum, skewness and kurtosis measures) of the variables, for the 637 hostels analysed in this study. *Panel A* includes hostels in the cities of world countries with serious human rights violations (i.e., Myanmar, Russia, Iran, Ethiopia, China, Belize, Egypt, Morocco, Sri Lanka, Vietnam, Azerbaijan, Ukraine, UAE and Malaysia). *Panel B* includes hostels in the cities of world countries that respect human rights (i.e., Hong Kong, Switzerland, New Zealand, Ireland, Denmark, Canada, UK, Australia, Finland, Netherlands, Austria, Germany, Norway and Sweden).

3.2 Method

OLS regressions are used to test the hypotheses formulated in Sub-section 2.4. According to Thrane (2005), OLS regression is the technique commonly used to estimate hedonic price models. Given that observations (hostels) are grouped into clusters (countries), with model errors uncorrelated across clusters but correlated within-cluster, a cluster-robust

variance matrix is estimated, that is robust to both heteroskedasticity and within-cluster correlation (e.g., Wooldridge, 2003). In line with the approach commonly used in the literature on hedonic pricing for tourism accommodations, a semi-logarithmic form is used in this study. There is a certain consensus in the literature in favour of the semi-logarithmic form, for its advantages. One advantage is that it partly solves the problem of heteroscedasticity. Other advantages are that it is simple from a computational point of view, and it allows for the use of dummy variables and not just quantitative variables, as is the case of the logarithmic form. It also allows the estimated coefficient for each attribute to be interpreted as a price-premium or price-penalty. Finally, the semi-logarithmic form is less sensitive to the specification of the model (i.e., considered attributes) than the linear form (see Peña et al., 2016, p.186).

We use a stepwise procedure to test the two hypotheses formulated in Sub-section 2.4. Thus, in step 1, such as Cró and Martins (2017), we only analyse the impact of the six characteristics evaluated online by hostel guests and control variables in the prices of hostels. The equations to be estimated can be written as:

$$PP_i = c + \sum_{k=1}^{K} \beta_k X_{ik} + \theta_D D_i + \theta_{Pr} PR_i + \theta_N \ln(N_i)$$
$$+ \theta_{SD} SD_i + \theta_B B_i + \theta_w W_i + \theta_{AW} AW_i + \varepsilon_i \tag{1}$$

$$\ln P_i = c + \sum_{k=1}^{K} \beta_k X_{ik} + \theta_D D_i + \theta_{Pr} PR_i + \theta_N \ln(N_i)$$
$$+ \theta_{SD} SD_i + \theta_B B_i + \theta_W W_i + \theta_{AW} AW_i + \varepsilon_i \tag{2}$$

where the dependent variables are PP_i – the premium price for hostel i equation (1) or ln P_i – the natural logarithm of absolute price of hostel i equation (2) and the independent variables are: X_i – the rating for hostel i of each of the six characteristics evaluated online by customers - atmosphere, cleanliness, facilities, location staff and security; D_i – a dummy variable indicating that the price refers to accommodation in dormitories; PR_i – a dummy variable indicating that the price refers to accommodation in private rooms; N_i is the total number of reviews the hostel i received; SD_i is the standard deviation of the most recent 20 reviews for hostel i; B_i – a dummy variable that takes the value 1 if breakfast is free in the hostel i; W_i – a dummy variable that takes the value 1 if WiFi is free in the hostel; AW_i – dummy variable that takes value 1 if the hostel i ever won a HOSCAR award[9],[10]; ε is a random error term adjusted for clustering, c is a constant term, β and θ are parameters to be estimated, i indicates the hostel and k refers to each specific characteristic. The last three dummies (B_i, W_i and AW_i) analyse the impact of offering a better-quality service in hostel prices.

In step 2, we add multiplicative dummy variables to test the first research hypothesis. To test the first research hypothesis – if coefficients linked to security attribute (as well as location and cleanliness attributes) have a stronger significant effect on hostel prices located in countries with serious human rights violations – we have included three multiplicative dummy variables (*SECURITY *D$_{HR-VIOLATIONS}$*; *LOCATION *D$_{HR-VIOLATIONS}$* and *CLEANLINESS *D$_{HR-VIOLATIONS}$*) in the equations (1) and (2), to analyse whether in countries with serious human rights violations the hostel guests are willing to pay a premium in terms of price for hostels with higher levels of security, location and

cleanliness. $D_{HR\text{-}VIOLATIONS}$ is a dummy variable indicating that the price refers to a hostel located in one of the countries with serious human rights violations.

Finally, in step 3 to test the second research hypothesis – if female and contemporary tourism backpacker are willing to pay a higher premium in terms of price for a hostel with high levels of security in countries with serious human rights violations comparatively to countries that respect human rights – we change the multiplicative variables to *SECURITY* *$*D_{HR\text{-}VIOLATIONS}$* *Contemp* and *SECURITY* *$*D_{HR\text{-}VIOLATIONS}$* *Female* in the equations (1) and (2), where *Contemp* is a dummy variable that assumes the value 1 when the percentage of consumer reviews by customers aged 30 years or more (the contemporary tourism backpacker) in the hostel *i* is higher than average percentage of consumers reviews by customers aged 30 years or more in the other hostels in the country's city, and *Female* is a dummy variable that takes the value 1 when the percentage of female's comments in the hostel is higher than the average percentage of female's comments in the remaining analysed hostels in the country's city. If these two multiplicative variables are positive and statistically significant, this means that females and contemporary tourism backpackers are willing to pay a higher premium in terms of price for a hostel with high levels of security in the countries with serious human rights violations comparatively to countries that respect human rights.

4 Empirical results

The empirical results are reported in Tables 3 and 4. In all estimates, it is clear that among the six quality hostel characteristics under scrutiny, only security, cleanliness and location have significant positive effects on hostel's premium prices and/or hostel's absolute prices. The other three characteristics – atmosphere, facilities and staff have non-significant effects on price. Regression I in Tables 3 and 4, estimated for all the analysed hostels demonstrates that. This evidence is in line with the results obtained by Enz (2009); Amblee (2015) and Cró and Martins (2017). The results also show a significant positive effect between the number of reviews and both variables of hostel prices. Considering the information asymmetry present and the unique features of tourism products, such as intangibility and integration of production and consumption (see Zhao et al., 2015), it is expected that a high volume of online reviews may induce a perception of lowered risk. Consequently, the volume of reviews tends to influence online bookings and prices positively. The estimates also reveal that standard deviation variable for the most recent 20 reviews, presents a non-significant effect on prices. A similar result was found by Cró and Martins (2017) in their study on the impact of security on hostel prices in Europe. As expected, the results reveal that accommodation in dormitories is cheaper than in private rooms, with both dummy variables statistically significant. The results also show that the policy of offering breakfast by the hostels can be a good business policy by allowing them to charge a higher price. However, the offer of free WiFi by the hostels shows no impact on prices. Given that more than 95% of the hostels in the sample offer free WiFi (see Table 2), this service does not present itself as a differentiating feature to the point of justifying the payment of an additional price. Finally, the results show that hostels that have won the HOSCAR prize tend to charge a higher price and a higher price premium compared to other hostels. This result seems to suggest that the *Hostel Award* dummy variable can be used to rate hostels' quality, such as in hotels with the star-rating system, given the absence of this indicator for hostels.

Table 3   Effect of human rights on hostel average price premium

Model	I		II		III		IV		V		VI	
Variable	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat.
Constant	-108.782***	-3.837	-108.204***	-5.335	-95.164***	-3.061	-88.401***	-3.768	-92.460***	-3.093	-97.051***	-3.231
Security	6.485***	2.834	4.340**	2.159	5.372**	2.254	5.044**	2.393	4.609**	1.966	5.088**	2.186
Security*$D_{\text{HR-VIOLATIONS}}$			3.897***	2.895								
Location	4.855***	2.593	1.725**	2.467	4.600**	2.534	4.542**	2.520	4.564***	2.599	4.688***	2.619
Location*$D_{\text{HR-VIOLATIONS}}$			3.479***	3.099								
Cleanliness	4.866**	2.213	4.851*	1.886	5.145**	2.000	5.436**	2.099	5.201**	1.999	5.533**	2.032
Cleanliness*$D_{\text{HR-VIOLATIONS}}$			3.611***	2.722								
Atmosphere	-0.717	-0.197	-1.471	-0.487	-1.084	-0.311	-1.215	-0.339	-1.269	-0.379	-0.809	-0.233
Facilities	2.133	0.883	1.074	1.298	1.942	0.807	1.525	0.673	2.241	0.976	1.865	0.777
Staff	-1.958	-0.949	-1.325	-0.602	-2.202	-1.129	-2.012	-1.043	-1.810	-1.004	-1.821	-0.968
Ln (Number Reviews)	1.424**	2.019	1.647*	1.839	1.442**	2.343	1.666*	1.875	1.514*	1.715	-1.545*	-1.825
Variance Rating	4.307	0.827	3.604	1.144	4.248	0.814	3.552	0.721	3.320	0.623	3.403	0.634
Dormitories	-5.883***	-4.857	-5.910***	-3.153	-5.226***	-2.978	-4.850***	-3.290	-5.559***	-3.100	-5.548***	-3.334
Private Rooms	23.049***	3.781	22.672***	4.559	23.379***	3.900	23.748***	4.078	21.706***	3.985	21.972***	3.874
Breakfast	14.363***	5.183	10.333***	2.944	4.336***	14.386	14.978***	5.220	12.051***	4.208	13.475***	4.796

Table 3 Effect of human rights on hostel average price premium (continued)

Model	I		II		III		IV		V		VI	
Variable	*Coef.*	*t-stat.*	*Coef.*	*t-stat.*	*Coef.*	*t-stat.*	*Coef.*	*t-stat.*	*Coef.*	*t-stat.*	*Coef.*	*t-stat.*
WiFi	−6.423	−0.924	−4.874	−0.536	−6.037	−0.944	−6.820	−1.031	−3.121	−0.541	−5.165	−0.794
Hostel Award	18.205***	2.914	15.732**	2.416	18.857***	2.954	19.284***	3.091	15.309**	2.383	16.384***	2.712
Security*Contemp					1.241**	2.556						
Security*Female							1.719***	2.747				
Security*$D_{\text{HR-VIOLATIONS}}$*Contemp									2.673***	4.313		
Security* $D_{\text{HR-VIOLATIONS}}$*Female											1.935***	3.177
# Observations	637		637		637		637		637		637	
Adj. R^2 (%)	39.69		41.75		40.67		41.49		42.82		41.23	
Prob. (Wald *F*-statistic)	0.00		0.00		0.00		0.00		0.00		0.00	

Notes: This table reports the estimation results based on equation (1) for hostel average price premiums in the 14 world countries which most respect human rights and in the 14 world countries with more serious human rights violations, according to Human Freedom Index. $D_{\text{HR-VIOLATION}}$ is a dummy variable that assumes the value of 1 for the capitals of countries of panel A (the world countries with more serious human rights violations). ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively. Cluster-robust standard errors and covariance. In the case of Switzerland, Canada, Australia, Myanmar, Belize and the UAE have been used data relating not to the capital but its most populous cities: Zurich, Toronto, Sydney, Yangon, Belize City and Dubai, respectively.

Table 4   Effect of human rights on hostel absolute prices

Model	I		II		III		IV		V		VI	
Variable	*Coef.*	*t-stat.*	*Coef.*	*t-stat.*	*Coef.*	*t-stat.*	*Coef.*	*t-stat.*	*Coef.*	*t-stat.*	*Coef.*	*t-stat.*
Constant	0.876***	2.845	1.015***	4.363	1.223***	4.121	1.211***	4.020	1.501***	5.550	1.510***	6.115
Security	0.176***	3.562	0.042*	1.877	0.144***	3.050	0.117**	2.413	0.139***	3.222	0.080**	2.008
Security*$D_{HR\text{-}VIOLATIONS}$			0.105***	3.262								
Location	0.082**	2.277	0.034*	1.698	0.077**	2.261	0.070**	1.995	0.073**	2.329	0.077**	1.998
Location*$D_{HR\text{-}VIOLATIONS}$			0.134**	2.021								
Cleanliness	0.099**	2.240	0.038*	1.733	0.083**	1.977	0.072*	1.699	0.070*	1.819	0.089**	2.536
Cleanliness*$D_{HR\text{-}VIOLATIONS}$			0.118***	3.543								
Atmosphere	0.056	1.225	0.012	0.340	-0.007	-0.168	0.049	1.114	-0.026	-0.641	0.020	0.554
Facilities	0.016	0.387	-0.029	-1.088	0.008	0.189	0.013	0.310	0.012	0.320	-0.042	-1.456
Staff	-0.021	-0.633	0.018	0.725	0.016	0.498	-0.024	-0.740	0.048	1.637	0.007	0.273
Ln (Number Reviews)	0.137***	9.718	0.051*	1.877	0.131***	9.751	0.128***	9.417	0.073***	5.677	0.051***	4.267
Variance Rating	0.011	0.334	0.040	1.111	0.013	0.843	0.015	1.421	0.011	0.772	0.084	1.238
Dormitories	-0.431***	-5.536	-0.492***	-8.384	-0.449***	-6.041	-0.468***	-6.217	-0.504***	-7.450	-0.519***	-8.360
Private Rooms	0.382***	5.087	0.320***	5.607	0.269***	3.695	0.429***	5.889	0.264***	4.029	0.353***	5.913
Breakfast	0.446***	8.682	0.205***	5.105	0.349***	6.914	0.443***	8.937	0.267***	5.774	0.285***	6.830

Table 4   Effect of human rights on hostel absolute prices (continued)

Model	I		II		III		IV		V		VI	
Variable	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat.
WiFi	-0.152	-1.099	-0.040	-0.389	-0.148	-1.131	-0.186	-1.394	-0.111	-0.927	-0.111	-1.016
Hostel Award	0.291***	2.954	0.130*	1.745	0.225**	2.305	0.208**	2.172	0.117**	2.057	0.279**	2.351
Security* Contemp					0.093***	7.961						
Security*Female							0.092***	6.826				
Security*D$_{LEAST-PEACEFUL}$*Contemp									0.141***	14.389		
Security* D$_{LEAST-PEACEFUL}$*Female											0.156***	19.098
# Observations	637		637		637		637		637		637	
Adj. R^2 (%)	52.19		72.89		56.55		55.46		64.07		69.82	
Prob. (Wald *F*-statistic)	0.00		0.00		0.00		0.00		0.00		0.00	

Notes: This table reports the estimation results based on equation (2) for hostel's absolute prices in the 14 world countries which most respect human rights and in the 14 world countries with more serious human rights violations, according to Human Freedom Index. D$_{HR-VIOLATION}$ is a dummy variable that assumes the value of 1 for the capitals of countries of panel A (the world countries with more serious human rights violations). ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively. Cluster-robust standard errors and covariance. In the case of Switzerland, Canada, Australia, Myanmar, Belize and the UAE have been used data relating not to the capital but its most populous cities: Zurich, Toronto, Sydney, Yangon, Belize City and Dubai, respectively.

Next, we present the evidence obtained regarding the two research hypotheses. In the first research hypothesis, we analysed whether coefficients linked to security attribute (as well as location and cleanliness attributes) have a stronger significant effect on hostel prices located in countries with serious human rights violations – we find that multiplicative dummy variables included in both tables (*Security* *$*D_{HR\text{-}VIOLATIONS}$; *Location* *$*D_{HR\text{-}VIOLATIONS}$ and *Cleanliness* *$*D_{HR\text{-}VIOLATIONS}$) show positive and statistically significant coefficients.

Given that $D_{HR\text{-}VIOLATIONS}$ assumes the value of 1 for a hostel located in one of the countries with serious human rights violations, this result means that hostel guests are willing to pay a higher price and/or a higher price premium in countries with serious human rights violations comparatively to countries that respect human rights if the hostel has higher levels of security, and better location and cleanliness. Given the severe impacts on tourism activity and the level of risk perceived by the hostel guests of a substantial increase in human rights violations (Neumayer, 2004), it is expected that there is a greater propensity on the part of potential hostel guests to pay a higher premium in terms of price for a hostel that offer high-security standards in countries with serious human rights violations comparatively to countries that respect human rights. This result seems to show that there are no differences in terms of risk perception between backpackers and mass and individual tourists when travelling to countries with high risk, since, as the institutionalised tourists, the hostel guests are averse to risk and equally concerned about the risks of travel and destination.

A stream of literature points out that backpackers show an adventurous attitude, and as such are not averse to risk as institutionalised tourists (e.g., Elsrud, 2001). In this way, it would be expected that the impact of the security attribute on hostels prices would be identical in countries that respect and do not respect human rights. However, the results obtained do not allow validating this hypothesis. More recent studies show that differences in risk perception are fading (see, e.g., Reichel et al., 2007 and Larsen et al., 2011). Thus, if for example due to economic difficulties, the tourist chooses to stay in a hostel in a country with serious human rights violations, they are willing to pay a higher premium in terms of price for a hostel that offer high-security standards, given their risk aversion. Our results are thus in line with these most recent streams of literature.

Finally, regarding the last research hypothesis, given that *Security* *$*D_{HR\text{-}VIOLATIONS}$ *Contemp* and *Security* *$*D_{HR\text{-}VIOLATIONS}$ *Female* show positive and statistically significant coefficients in regressions V and VI (Tables 3 and 4), we conclude that in countries with serious human rights violations, female and older costumers are willing to pay a higher price or a price premium than in countries that respect human rights.

Given that female and older customers belong to the customer group that tends to be more fearful of being victimised, these results are consistent with the vulnerability hypothesis of Ferraro (1995) since in the countries with serious human rights violations the risk perception and the objective probability of women and older customers being victimised is much higher than in most countries that respect human rights. The vulnerability hypothesis also shows valid when we estimate the model for all the analysed hostels (see regressions III and IV in Tables 3 and 4). Concerns about the safety of certain customers groups, such as female and older customers, is something that the most recent literature has highlighted as a strategic issue for many hostel/hotel owners and managers. As an example, see the case of some luxury hotels that have incorporated female-only floors – for instance, the Four Seasons Hotel in Riyadh and the Georgian Court Hotel in Vancouver. The Sofitel in Luxembourg provides high floor rooms for

female travellers and room service delivered exclusively by female staff (Voyage, 2014). These strategies aim to provide female travellers with a safe and secure place. However, they received criticisms for being discriminatory and superficial because women still have to face the "real" risk when travelling outside the safe hotel rooms (Sathian, 2016). Our results confirm the validity of this strategy, especially in countries that do not respect human rights.

5   Managerial and theoretical implications

The violation of human rights is far outside the control of hotel managers. Sometimes collective pressure can be exerted over destination managers and policymakers in terms of reducing the level of risk associated with the country, by taking measures to improve respect for human rights. However, the results of those efforts are rarely successful. Even lobbying attempts to revoke advisory travel warnings (concerning arguably unlikely events) issued by governments are unlikely to succeed (Beirman, 2003). However, there are some managerial implications of the present study.

First, the results suggest that security is an important factor in guests' selection of a hostel, particularly in countries with serious human rights violations. Hostels in oppressive cities could charge a premium if they improve the customers' perceptions of security. Therefore, managers should be willing to invest in improving hostels security systems, namely in less secure locations. For instance, adopting high-tech security systems as well as staff's ongoing training in security issues (Chan and Lam, 2013; Hua and Yang, 2017) may be seen as a way to differentiate from competitors, with a significant positive impact on profitability.

Second, in the sense of improving the security perceptions of hostels' customers, in addition to security measures, hostels should improve their marketing communication. Safer hostels should take advantage of this. As emphasised by Björk and Kauppinen-Räisänen (2012, p.65) "*insight into risk dimensions that tourists discuss online enable destination marketers to take action, eliminate factors that cause risk perception, refine destination marketing communication, and build strong brands*". Seabra et al. (2013) added the need for a suitable marketing mix for different risk segments regarding the differences in terms of risk perception and income among female, and between older and younger backpackers. Besides that, the research by Hajibaba et al. (2015) suggests that there are crisis-resilient tourists who are unlikely to be deterred by dangerous circumstances. Travellers who are somewhat resilient to the type of crises such as terrorism, crime and human rights violations represent viable market segments to explore. On the other hand, group travel is considered to be a preferred option among those seeking to avoid risky situations (Lo et al., 2011).

Finally, given that there is a strong relationship between human freedoms and tourism destinations attractiveness, there should be a growing concern about the personal and economic freedoms by the authorities of countries with a poor reputation in terms of human rights, if they are interested in increasing tourism revenues. Saudi Arabia is a good example. The country has turned to tourism to reduce economic dependence on oil. It expects 30 million visitors by 2030.[11] To achieve this goal, Saudi Arabia authorities refer that "*it is essential to change the country's image abroad, which is impossible to achieve without the change of women's rights*" (see footnote 11). To reduce the perceived risk of the country, the country's authorities have announced: "*its plan to build*

a "semi-autonomous" visa-free travel destination along its north western Red Sea coast, where restrictions on women's dress, gender segregation and other conservative norms could be waived" (see footnote 11).

While changes are not implemented, exceptional security measures should be created, especially for female and older customers. This group of guests shows availability to pay a higher premium compared to other guests due to the presence of security measures in the accommodation (Cró and Martins, 2017; Cró et al., 2019). Concerns about security lead many lodging owners and managers to place security devices or to allocate areas/floors for this group of guests (Chan and Lam, 2013; Yang et al., 2017). Some luxury hotels have incorporated female-only floors.

6 Conclusions

The security issue has been identified as one of the global forces that will drive the tourism industry in the new millennium. For the customers of tourism services, safety and security are probably part of the most important aspects regarding the industry. Every risk factor perceived by tourists could be a reason for replacing a destination, or a hotel, by an alternative. Literature shows that security issues related to the disrespect for human rights tend to create barriers to travel and tend to affect decision-making in the choice of a given tourist destination, with consequences on the hospitality industry.

We explore and quantify the impact that comments placed on Hostelworld's website by hostel guests have in terms of the price premium paid for a room in a hostel, using the hedonic pricing method. For a sample of consumer reviews for 637 hostels in 28 cities worldwide (the majority being capitals), with different levels of respect for human rights, we test if the security attribute (as well as cleaning and location) have an impact on the premium in terms of price that the customer of a hostel is willing to pay, depending on the level of respect for human rights by countries and demographic factors (such as gender and age).

We find that backpackers are willing to pay a higher premium in terms of price for hostels located in countries with serious human rights violations comparatively to countries that respect human rights if the hostel offers a high level of security. This result seems to show that backpackers such as the mass and individual tourists are averse to risk and equally concerned about the risks of travel and destination. This conclusion is in line with the studies of Reichel et al. (2007) and Larsen et al. (2011) which show that differences between tourists in terms of risk perception are fading. The results seem to contradict the idea that backpackers are adventurous tourists and have a lower perception of risk. If that were the case, it would not be reasonable and acceptable to pay a premium in terms of price for greater security.

Finally, in the case of female and older customers, the results show that they are willing to pay a higher price and/or higher price premium than males and young hostel guests, respectively, for a hostel with a higher security level. This willingness is especially true in the case of hostels located in countries with serious human rights violations (that are inherently riskier countries to visit). Females and older customers are the groups of individuals that tend to be more fearful of being victimised according to the vulnerability hypothesis. This last result is also in line with the backpacker tourists' characterisation carried out by Paris (2012). In his study, the author concludes that the

flashpackers group shows a greater willingness to pay for more comfort and security compared to the non-flashpacker group, given their greater purchasing power.

The challenge for managers lies in knowing which safety and security systems are important to guests. Literature reveals that there is a gap between the manager' and guests' perceptions of the relative importance of safety and security facilities. Moreover, despite the importance given by customers to accommodation with high standards of safety and security, at the same time customers may dislike when such standards cause them inconvenience. The challenge lies in making careful choices that provide appropriate standards for safety while not interfering with the hospitality and service levels that customers have come to expect.

Finally, to provide more conclusive results about the importance of human rights on lodging prices, new empirical studies should be carried out for other types of accommodation, such as hotels and apartments. Given the absence of the security attribute in consumer review reports compiled by the most common tourism platforms, such studies should be performed by surveys.

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Notes

1   Saha et al. (2017) used the term illiberal democracy in situations where there are more or less free and fair elections, but the institutions associated with a liberal democracy (such as an independent judiciary) are not in place.

2   The *Freedom House Democracy Index* is available online at: https://freedomhouse.org/report/fiw-2017-table-country-scores and is based on an annual report drawn up by Freedom House (an independent watchdog organisation dedicated to the expansion of freedom and democracy around the world) which only takes into account the degree of compliance with political rights and civil liberties (see https://freedomhouse.org/report/methodology-freedom-world-2017).

3   The Human Freedom Index is available online at: https://www.cato.org/human-freedom-index and is co-published by the Cato Institute, the Fraser Institute and the Liberales Institut at the Friedrich Naumann Foundation for Freedom. This index presents the state of human freedom in the world based on a board measure that encompasses personal, civil and economic freedom.

4   This index is no longer constructed and offered (Green, 2001).

5   The Physical Quality of Life Index is an attempt to measure the quality of life or well-being of a country. The value is the average of three statistics: basic literacy rate, infant mortality and life expectancy at age one, all equally weighted on a 0 to 100 scale. This index emerged in the 1970s due to dissatisfaction with the use of GNP as an indicator of development.

6   The website Hostelword is the world leading hostel booking channel and not only provides information about hostels, but also about bed and breakfasts, hotels, camping sites and other categories of accommodation establishments. This study analyses only accommodation establishments classified as hostels.

7   These cities have a larger population and a greater number of hostels relative to the capital of the country, giving a better representation of the reality of this type of accommodation in the country, and as such they are more adequate to the study that we intend to develop.

8   With regard to the world countries with more serious human rights violations, only those countries that offer more than one hostel-type accommodation on the Hostelworld website were included in our sample. Among other countries, Libya (4.42), Yemen (4.56), Syria (4.63), Central African Republic (4.87), Venezuela (4.91), Algeria (5.04), Democratic Republic of Congo (5.09), Angola (5.19), Guinea (5.22), Zimbabwe (5.24), Pakistan (5.28), Chad (5.28) and Saudi Arabia (5.31) were excluded from the sample because they did not offer hostel-type accommodation on the Hostelworld website.

9   The list of hostels that have been awarded a HOSCAR are available online at: http://www.hostelworld.com/hoscars#

10   This dummy variable is added to the model, since the literature shows that in the case of hotels, the price is influenced positively and statistically by the variable star rating (see Israeli, 2002). Israeli (2002) demonstrated that the classification system (star rating) is a good indicator of price and, it is assumed to be also one of quality as he equates more quality with luxury and higher price. Since this type of classification is non-existent in the case of hostels, we use hostel HOSCAR prize (prize awarded by the best hostel of its category) as a proxy for the quality of services provided by the hostels.

11   More detailed information is available online at: https://www.news.com.au/sport/sports-life/how-saudi-arabia-is-trying-to-balance-change-with-its-conservative-culture/news-story/dc4da7f82d930d5c41fc894e0dc107ce