The influence of social isolation and loneliness on the intention to travel for tourism

Edar da Silva Añaña, Gustavo da Rosa Borges and Jonas Fernando Petry

Abstract

Purpose - This study aims to evaluate the factors influencing certain negative feelings, such as social isolation disorder and loneliness, on consumers' intentions to travel for tourism.

Design/methodology/approach - This quantitative research used a survey questionnaire composed of eight interval evaluation questions and six demographic variables for the data collection. A total of 290 usable responses were gathered from social networks. The evaluation of the Measurement Model adjustment and the verification of the research hypothesis was done by a structural equations modeling.

Findings - The results reveal that social isolation is not a monolithic construction; instead of that, it is a construct formed by two interrelated factors, the social isolation itself, involving the individual and her/his personality, and the social integration, a factor of situational order, referring to the relations of the individual with his reference group. Factors are influenced by the ease/difficulty of the individual, in cultivating relationships with other people and significantly influence the intention to travel for tourism.

Practical implications – The study contributes to tourism management by breaking the phenomenon down into two dimensions and evaluating the impact of each of them on consumer attitudes, which should be very useful for the segmentation and positioning of tourism products.

Originality/value - Results support the evidence reported by Murphy, who found that people tend to want to make friends, but that this tendency did not appear to be evident about travel and supported Hawthorne's findings, that the more socially isolated people are, the less they will want to interact with others, demonstrating that social isolation is indeed an inhibitor of social interaction.

Keywords Social isolation, Attitudes to traveling, Intention to travel, Loneliness disorder Paper type Research paper

1. Introduction

Tourism is one of the most competitive markets that operate on a global scale (Nilashi et al., 2019). It is a delicate and sensitive business that is susceptible to many different external influences and in which demand can be influenced by several factors, one of which is attitudes related to enjoying travel or not. Rodrigues and Mallou (2014) point out that economic and psychological factors have a great effect and directly affect the performance of the tourism chain. The so-called tourism industry is subject to positive or negative impacts from external factors, such as the pandemic of COVID-19 (Cheung et al., 2021), that should be understood, evaluated and quantified as the development of this sector has effects on the population as a whole and contributes to local and regional development (Dragouni et al., 2016). But despite the sector's vulnerability to external shocks such as COVID-19, the tourism industry is known for being resilient (Jin et al., 2022).

One way of developing tourism is to ensure that the destination is attractive for visitors while upsetting the resident population as little as possible. To achieve this, it is essential to investigate tourists' attitudes (Santos and Giraldi, 2016), to develop products that satisfy

Edar da Silva Añaña is based at the PPG of the Business College, FURG, Rio Grande, Brazil. Gustavo da Rosa Borges is based at the PPG of the Business College, UNIPAMPA, Bage, Brazil. Jonas Fernando Petry is based at the Faculty of Social Studies, Universidade Federal do Amazonas, Manaus, Brazil.

Received 30 August 2022 Revised 28 October 2022 Accepted 28 October 2022

We sincerely appreciate the reviewers for all your valuable comments and suggestions, which helped us in improving the quality of the manuscript.

their requirements and desires, respecting the interests and well-being of the resident population. To develop products that suit everybody's preferences, the tourism manager must consider tourists' attitudes and habitual behavior (Hultman *et al.*, 2015), as this is the only way to minimize fears and anxieties that could scare visitors away and reduce people's interest in traveling (Delener, 2010).

Concerning people's behavior and intentions, one concern that has attracted the attention of many researchers is social isolation and loneliness, which are aspects that have been identified as personal and social problems (Biordi and Nicholson, 2013; McPherson *et al.*, 2006).

Social isolation is a problem that affects many people in America. It occurs when a person has a small network of contacts or interacts little with their contacts (Gierveld et al., 2006) and is also a consequence of daily life (Pearce, 1982). For Hawthorne (2006), social isolation equates to living without company, without support, or without social dialog. He considers that it is important to measure social isolation among the elderly because it is a factor that conditions adherence to public health programs. However, measurement of the phenomenon is somewhat problematic, because of the length of the questionnaires used and people's reluctance to answer questions about negative aspects of life. Attempting to overcome these difficulties, Hawthorne proposed a brief scale, with just six items covering issues related to "friendship." The Friendship Scale is a semantic resource that can be used to infer social isolation. Although the instrument was originally proposed for use in public health, it will be used in this study because of the characteristics of the phenomenon under analysis – tourism with the objective of escape – which has similarities to some of the therapeutic resources used to deal with isolation and loneliness.

Loneliness is a state, a subjective and negative experience that results from the comparison between the desired quantity and quality of relationships and those of the actual relationships habitually maintained. Loneliness is the opposite of belonging, social integration, and sharing pleasures and anxieties. Once isolated, a person establishes less and less contact with relatives, and the people to whom they are close and who they know, including their confidants (McPherson *et al.*, 2006). People who are socially isolated tend to be more solitary, but social isolation is not necessarily synonymous with loneliness (Gierveld *et al.*, 2006).

Many studies have highlighted economic (Rodrigues and Mallou, 2014), sociodemographic (Decrop, 2000), socioeconomic factors (Szopiński and Staniewski, 2016) and behavioral intentions (Correia and Pimpão, 2008; Huang and Hsu, 2009) as constraints on the consumption decisions of tourists, but, in addition to these elements, it is also necessary to observe emotional aspects (Mitev and Irimiás, 2021). It is believed that people who are isolated tend to travel less, and this is prejudicial to the tourism chain, which provides jobs and contributes to regional development. Some studies have attempted to understand the effect of tourists' feelings, but few have attempted to measure the impact on travel decisions (Dragouni et al., 2016).

Working from this premise, the objective of this paper is to assess the influence of certain negative feelings, such as social isolation disorder and loneliness, on consumers' intentions to travel for tourism. The research question guiding this study is:

RQ1. Do social isolation and loneliness influence the intention to travel for tourism?

These two constructs are chosen as possible predictors of a pro-travel attitude because they are striking characteristics of people who tend to have less contact with others, for psychological or circumstantial reasons (Biordi and Nicholson, 2013; Ferreira *et al.*, 2013; McPherson *et al.*, 2006), which may be a determinant factor in the decision to travel or not to travel for tourism.

2. Theoretical framework

2.1 Tourism

Tourism is part of an important social and economic chain, capable of stimulating people to transit between territories and countries, escape from their routines and enjoy moments of peace and leisure. Tourism is a wide-ranging term that encompasses multiple actors, including the tourists themselves who are the driving force behind the whole process, and organizations that constantly strive to adapt to demand to provide good service and captivate the tourists (Caldito *et al.*, 2015).

A place that people visit for tourism is called the tourism destination. In theory, all destinations should be attractive and provide tourists with satisfaction, and, when this happens, tourists tend to recommend the destination to other people (Hultman *et al.*, 2015). Therefore, it is so important to study tourists' intentions and behavior, to captivate them with enjoyable experiences (Aroeira *et al.*, 2016).

To better develop tourism, firms in the industry should work to minimize travelers' fears and concerns. On counterpoint, the economic elements and quality of services provided, such as delayed flights, old planes in a poor state of repair, and unpleasant hotels impact the intention to travel for tourism, which can get to the point at which people no longer travel when they have time off from work (Delener, 2010).

Notwithstanding the economic aspects, tourism demand is also dependent on people's motives for traveling and inclination to do so (Rodrigues and Mallou, 2014). Therefore, tourists' inclinations and their sentiments and mood are important factors in the decision to travel for tourism. In a study on the influence of psychological factors on the online purchase of rural tourism packages, San Martín and Herrero (2012) showed that psychological factors, specifically undesirable feelings, influenced the decision to travel for tourism. One such undesirable feeling is social isolation, the cause of countless problems (Biordi and Nicholson, 2013; Ferreira et al., 2013; McPherson et al., 2006).

2.2 Social interaction

Interaction in social situations can be understood through the theory of social facilitation/ social situation from the field of experimental social psychology, which is an attempt to explain the behavior of individuals in social situations (Gaumer and Lafief, 2005). Human beings are an ultrasocial species. A fundamental characteristic of successful human interaction is pro-social preferences and concern for the well-being of others (Samek *et al.*, 2020).

In the field of social psychology, the mechanism of social facilitation/social situation is conceptualized as based on two pillars. The first is founded on arousal and the second is on an understanding of self-awareness (Steinmetz and Pfattheicher, 2017). The theory underpinning the mechanism based on arousal is that the presence of others provokes arousal, making actors return to their dominant response. When a task is simple or performed by an expert, the dominant response is generally the correct response. When the task is complex or performed by a novice, the dominant response is generally the incorrect response (Perez Neider *et al.*, 2019).

The second mechanism – self-awareness – is founded on theories according to which the underlying mechanisms are based on factors that are more cognitively and socially complex than arousal. They comprise theories such as the objective self-awareness theory and the control theory, in which it is not arousal that drives social facilitation, but attention to self-awareness. For example, the theory of control posits that the presence of other people directs attention to oneself, to assess someone's performance about one's standards. In the presence of others, more attention is paid to conforming to the behavioral standard than

when one is alone, making the behavioral pattern regress to the mean (Perez Neider et al., 2019).

Social situations can be defined by a type of social encounter with which the members of a culture or subculture are familiar. Behavior is therefore affected by the situation. If we wish to explain or understand social behavior, we must explain how social situations influence it. Thus, situations are not direct determinants of behavior, because people can choose which situations to enter. Individuals can also avoid situations, because they are not interested in the objectives offered or because they feel that they cannot deal with them. The choice of whether to travel is a characteristic of people, and, in part, a function of recent activities and experiences, such as a period of frustration and tension, a period of satisfactory work or a day of feeling full of energy, for example (Argyle *et al.*, 1981).

It also appears appropriate to assume that the social interactions that occur between people with characteristics that can lead to social isolation and people who frequently travel for tourism fit this definition and probably possess these resources. People enter situations because they can achieve certain objectives related to forms of motivation (making friends, for example) (Murphy, 2001). For these reasons, it is expected that:

H1. A person's facility for forming relationships and making friends reduces social isolation (H1a), strengthens social interaction (H1b) and increases the intention of traveling for tourism (H1c).

Social facilitation is described as prioritizing someone's dominant response simply because they are in the presence of other people (Gaumer and Lafief, 2005). Therefore, the central hypothesis of the social situation analysis is that all other characteristics (objectives and structure of objectives, rules, roles, the repertoire of elements, sequences of behaviors, concepts, environmental contexts, language and speech and skills and difficulties) can be explained functionally in terms of their contribution to achieving objectives and satisfying impulses (Argyle *et al.*, 1981). However, it was observed that the mere presence of other people does not necessarily affect everybody in the same manner. The mere presence of other people can have very different effects on different people (Gaumer and Lafief, 2005).

Understanding that social interaction is present in society and influences several different sectors, here, the aim is to study it within the tourism industry. As already pointed out by Zajonc *et al.* (1969), social facilitation or social inhibition tends to occur when under social attention, but they did not test this statistically. To analyze this characteristic within Tourism, this study draws on the evidence reported by Zajonc *et al.* (1969) to assess the importance of social interaction as a facilitator of the intention to travel for tourism, in the expectation that:

H2. Social interaction facilitates the intention to travel for tourism directly (*H2a*) and indirectly, transferring a part of the effect of the personal relationship (*H2b*).

2.3 Social isolation and loneliness

Social isolation can be considered a state of loneliness that affects a person's outlook on life (Campagne, 2019). Social isolation is related to the objective characteristics of the situation and is defined as an absence of relations with other people. However, social isolation is not necessarily synonymous with loneliness, as "loneliness is a subjective and negative experience, and the outcome of a cognitive evaluation of the match between the quantity and quality of existing relationships and relationship standards" (Gierveld *et al.*, 2006, p. 486). The opposite of social isolation is social integration, the feeling of belonging to a social group, a location, or an institution.

Social isolation is a flight from society, a distancing from a person's network of contacts, which may occur for voluntary or involuntary motives. Voluntary motives originate in the individual, caused by internal reasons, such as stress, for example (Campagne, 2019); and

involuntary motives generally derive from external forces, such as an unsatisfactory social experience (Biordi and Nicholson, 2013).

Social isolation can be perceived as the quantity, frequency, quality, and duration of contact. The individual feels this perception of isolation (McPherson *et al.*, 2006). People who suffer from social isolation, in addition to being more aggressive, tend to have restricted liberty and greater difficulty with expressing their problems, which is typical of withdrawal (Netto *et al.*, 2017). People in social isolation tend to be more aggressive (Ferreira *et al.*, 2013), and, when the disorder attains an elevated degree, it is even possible that they will reach such a state of loneliness that they will need to be admitted to hospital.

Although social isolation does not prevent someone from traveling (San Martín and Herrero, 2012), it is believed that people who are more isolated socially are less likely to travel for tourism and this supports the following hypothesis:

H3. The greater the individual's social isolation, the less their intention to travel for tourism.

Hawthorne (2006) suggests that social isolation is a psychological state that causes people to live "without company" and "without social support or dialog". The result of his work is of great merit since he produced a parsimonious and reliable scale for administration to elderly respondents. However, as he acknowledges at the end of the paper, further work is needed to validate the usability of the Friendship Scale in other contexts, bearing in mind that the scale comprises items covering issues typical of isolation (e.g. I found it easy to make contact with people) and social support (e.g. I had someone to share my feelings with). As difficulty with establishing relations generally results in withdrawal from other people or groups, it can be hypothesized that:

H4. The greater an individual's tendency for social isolation, the less they will interact with other people.

Social isolation is a psychological state that affects a person's quality of life (Campagne, 2019) and makes it difficult for them to interact in groups. However, social isolation is not in itself synonymous with loneliness. Loneliness is a subjective experience that results from a comparison between the actual quantity and quality of a person's relations and the levels they would like to have (Gierveld *et al.*, 2006). Loneliness can be present in the absence of social isolation, and vice-versa, and either of them can influence the decision to travel or not to travel.

People who find it easy to form relationships may decide not to travel because of a lack of company or because they are discouraged from doing so by their network of contacts, and the opposite is also true. As can be seen, social isolation can impact directly and negatively on the decision to travel but can also do so indirectly via the person's relationship network.

Vandervoort (2000) conducted a study with university students in San Francisco (United States), finding that men are more socially isolated than women, especially single men. In contrast, Ferreira et al. (2013) concluded that young Portuguese women were more socially isolated than men. The issue of gender, which was so important in the past, is being revised little by little as women gain more space in the labor market and, as a result, family patterns change. However, despite the transformations that have taken place, men still tend to have larger contact networks than women (McPherson et al., 2006) which supports the expectation that:

H5. Social isolation has a greater influence on the intention to undertake tourism travel among women than among men.

The literature on social isolation also brings other psychological aspects, such as the fear of travel, which can be associated with several factors such as natural disasters (Çakar, 2021), negative association of the tourist as a COVID-19 disseminator (Kuhn *et al.*, 2022), restrictions,

shock, panic, risks, anxiety and worry (Fennell, 2017). These are some of the factors associated with the social psychology of tourist behavior presented by Pearce (1982) and which are not objects of this research.

3. Methodology

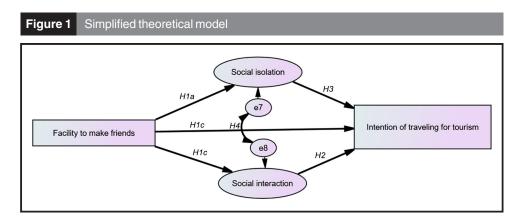
This study can be classified as descriptive and quantitative, employing primary data and hypothesis testing (Marconi and Lakatos, 2017). Figure 1 illustrates a Simplified Theoretical Model that will be used to test the five research hypotheses. *H2a* and *H2b* are combined and shown as *H2*, as they will be tested on the same path, and *H5* is not included in this diagram since it deals with the moderating effect of sex on the relationship tested as *H3*.

Social isolation and loneliness were measured by an adapted version of Hawthorne's (2006) scale, with an additional item of a general nature, asking respondents about their relationship with the reference groups. In common with the other items on the scale, this item has a five-point response scale ranging from "I feel [totally isolated from]" to "[totally connected to]" the reference groups.

In addition to the questions on the scale, an additional exit question was included to probe the intention to travel during the next holidays, responded on a five-point scale varying from "I definitely will not travel", to "I definitely will travel" [during the next holidays]. The six questions on the Friendship Scale adapted from Hawthorne (Hawthorne, 2006) were translated into Portuguese. These questions are as follows:

- 1. I find it easy to form relationships with other people.
- 2. I feel isolated from other people.
- 3. I have someone to share my feelings with.
- 4. It is easy to contact other people when I need help.
- 5. When I am with other people, I feel separated from them
- 6. I feel alone and friendless.

Demographic questions covered the variables sex, age group, family income, marital status and size of the family. The electronic questionnaire was pilot tested with 10 students from the Business Management degree at the Universidade Federal de Pelotas, RS, Brazil, and hosted on the university's LimeSurvey platform (https://survey.ufpel.edu.br/gpa). Researchers then sent out invitations to people in their contact networks. The sampling approach can be classified as intentional, with the assumption that the target population is homogeneous (Etikan *et al.*, 2016). According to Jin *et al.* (2022), it is a methodology that allows researchers and respondents to select qualified individuals to respond to the survey.



It was a condition of participating in the survey that individuals were in a state of isolation and loneliness. Despite the sample selection bias, this approach was effective for the study by focusing on individuals who share specific characteristics (Etikan *et al.*, 2016). A sample of 290 respondents, predominantly females, was collected during November and December 2019. After data collection, the data were exported to IBM® SPSS®20 and analyzed using IBM® AMOS® 22.0, as described below.

4. Results analysis and discussion

4.1 Sample characteristics

The study collected a total sample of 290 valid questionnaires, completed by 178 women and 112 men. Table 1 lists data for the sample by sex and age group. In both sexes, there were more people in the under 25s age group and the young adult group (26 < 35 years), but men were significantly older ($\chi^2 = 27.838$; DF = 4; p = 0.00) than women.

The sample was predominantly made up of young people with low or medium incomes (<R \$4,000.00), although there was a significant difference (χ^2 = 26.593; DF = 4; p = 0.00) in favor of males in the income groups over R\$6,001.00, which accounted for 38.4% of the men and just 17.1% of the women (Table 2).

4.2 Construction and analysis of the measurement model

Before analysis of the measurement model *per se*, the set of variables from the scale was subjected to principal components analysis, with Oblimin rotation, to assess the latent structure of the data. Whereas Hawthorne's study (2006) found a single latent factor, the result of our preliminary analysis suggested that the phenomenon is split across three dimensions, which together explain 73% of the variance. This latent structure (Table 3) comprises two factors with three variables each (social isolation and social interaction) and

S	Sex	<25	26 < 35	Age groups 36 < 45	46 < 55	56+	Total
Female	Count	78	61	25	9	5	178
	% of Sex	43.8%	34.3%	14.0%	5.1%	2.8%	100.0%
Male	Count	35	25	20	12	20	112
	% of Sex	31.3%	22.3%	17.9%	10.7%	17.9%	100.0%
Total	Count	113	86	45	21	25	290
	% of Sex	39.0%	29.7%	15.5%	7.2%	8.6%	100.0%

Approximate family income								
5	Sex	< 2.000	2.001 < 4.000	4.001 < 6.000	6.001 < 8.000	8.000+	Total	
Female	Count	3	68	25	16	14	176	
	% of Sex	30.1%	38.6%	14.2%	9.1%	8.0%	100.0%	
Male	Count	30	20	19	13	30	112	
	% of Sex	26.8%	17.9%	17.0%	11.6%	26.8%	100.0%	
Total	Count	3	88	44	29	44	288 ^s	
	% of Sex	28.8%	30.6%	15.3%	10.1%	15.3%	100.0%	

a third dimension, the facility for relationships. As this was merely a preparative procedure, the reliability of the two factors will only be analyzed in the next step.

Once the three possible dimensions of the phenomenon had been identified, confirmatory factor analysis was performed to test the reliability and validity of the two latent variables. Social isolation itself is formed by three attitude variables ("I feel isolated from other people.", "When I am with other people, I feel separated from them." and "I feel alone and friendless.") and social interaction, with three circumstantial variables ("I have someone to share my feelings with.", "It is easy to make contact with other people when I need help." and "I feel isolated from/connected to the reference groups."). As shown in Table 4, both factors had compound reliability (CR) indices that exceed the minimum cutoff for acceptability of 0.7 and average variance extracted (AVE) close to 0.5.

Discriminant validity was confirmed using the Bagozzi and Phillips (1982) method which proposes comparing the basic model, with freely estimated correlations, with another restricted model, in which correlations between factors are forced to unity. If the restrictions significantly degrade the model's fit, as is the case here, this is a sign that the factors are not perfectly correlated, indicating that there is discriminant validity.

For ease of reading, the manifest variables' means and standard deviations, by gender, are listed in Appendix Table A1. As can be seen, only the intention to travel in the upcoming season showed a significant difference between genders, which will be further discussed below.

As can be observed in Table 5, the restricted model, in which the correlation between the two factors was forced to one (1.0) has fit indices that are inferior to those of the model in which the correlation was estimated freely, for which reason the hypothesis that both factors are measuring the same facet of the phenomenon can be ruled out.

Social isolation		
oociai isolation	Social interaction	Facility for relationships
-0.919	_	_
-0.825	_	_
-0.758	_	_
_	0.827	_
-	0.820	_
_	0.630	_
_	_	0.852
	-0.825	-0.825 - -0.758 - - 0.827 - 0.820

Table 4 Comp	oound reliability (CR) and a	verage variance extract	ed (AVE) of the meas	urement model	
Factors	Variables	Unstandardized loading	Standardized loading	Compound reliability	Average variance extracted
Social	I feel separated	0.907	0.771	0.750	0.412
isolation	I feel isolated I feel alone	0.865 1.000	0.784 0.744		
Social interaction	It is easy to make contact	1.510	0.711	0.749	0.553
	I have someone to share	1.519	0.669		
	I feel isolated from/connected to	1.000	0.623		
Source: Research	h data				

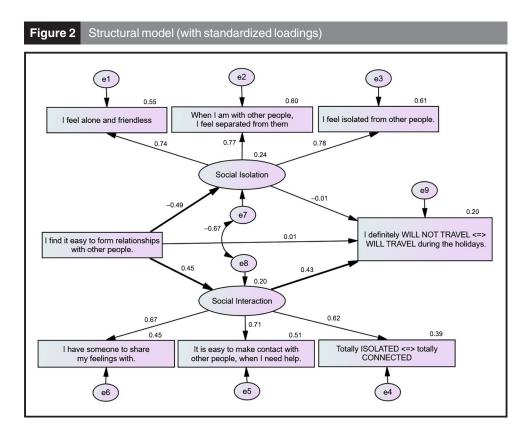
Table 5 Compar	ison of measure	ement mod	lels, with two	freely correlated	I factors or w	th restricted	correlation	
Model	CMIN	DF	Р	CMIN/DF	NFI	IFI	TLI	CFI
Free estimation Restricted	11.300 367.09	8 9	0.185 0.000	1.412 40.79	0.981 0.368	0.994 0.374	0.989 -0.055	0.994 0.367
Source: Research d	lata							

4.3 Construction and analysis of the structural model

The structural model was based on the measurement model and constructed using IBM® AMOS® 22. The full model (Figure 2) has fit indices (χ^2 = 21.629; DF = 18; p = 0.25, χ^2 /DF = 1.2; CFI = 0.995; TLI = 0.992 and RMSEA = 0.026) compatible with the recommended cutoffs of TLI > 0.90, CFI > 0.90, RMSEA < 0.05 and relative χ^2 (χ^2 /DF) < 3.0 (Brown, 2006; Byrne, 2001). To facilitate interpretation, arrows represent significant structural relationships have been plotted with a slightly heavier line in the diagram.

The results confirm that a facility for interpersonal relationships stimulates interaction with other people and significantly reduces the tendency for social isolation, but in contrast with what had been expected, does not directly drive the intention to travel for tourism. *H1a* and *H1b* are therefore confirmed, but *H1c* is rejected. This supports the evidence reported by Murphy (2001), who found that people tend to want to make friends, but that this tendency did not appear to be evident in travel.

The results also reveal an important negative correlation (an antagonism) between the tendency to social isolation (something which is possibly associated with each person's personality traits) and seeking interaction with other people or groups (circumstantial variables), which is intuitive. Although the theoretical references reviewed do not permit a discussion of aspects related to psychology or affect, it is not hard to imagine that more



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introverted people or those more predisposed to social isolation also find it difficult to interact in groups. This is confirmed in *H4*.

These results also support Hawthorne's findings (2006), showing that the more socially isolated people are, the less they will want to interact with others, demonstrating that social isolation is indeed an inhibitor of social interaction.

H3 and H5 presume that social isolation has significant influences on the intention to travel for tourism, which was not confirmed. As can be observed in Table 6, social isolation is significantly attenuated by the facility for relationships but does not have a significant effect on the intention to travel for tourism, thus rejecting H3 and H5. Therefore, neither social isolation nor gender affects the desire to travel for tourism. Thus, as highlighted in the discussion of H1c, when the issue in question is a tourist trip, there is a change in attitude. In this case, even when people are isolated or have little interaction with others, this does not interfere to travel. This constitutes important evidence that these two psychological problems (social isolation and loneliness) are not in principle impediments to a person wanting to embark on a tourism trip.

The results identify social interaction as the principal vector influencing intention to travel for tourism, considering that these variable conditions the intention both directly and indirectly. As can be observed in Table 6, social interaction transfers 43.1% of its weighting to a protourism attitude, including the 19.7% originating in the facility for relationships, confirming *H2a*. Considering the existence of the indirect relationship between interpersonal relationships and intention to travel for tourism, via social interaction, combined with the absence of a direct relationship between interpersonal relationships and intention to travel for tourism, it can be concluded that social interaction mediates the relationship between them, completely confirming *H2b*. These results confirm evidence reported by Zajonc *et al.* (1969), who had already identified a greater propensity to travel for tourism among people who interact more with others.

The mediating effect of social interaction was evaluated with Zhao *et al.* (2010) method. According to these authors, a total mediation occurs when there is no direct influence of the independent variable (X) on the dependent variable (Y), but the relationships between the independent variable (X) and the mediator (M), and between this and the dependent variable (Y), are significant. In this case, the authors employed that procedure to evaluate the mediation effect of social interaction (M) in the influence of facility for relationships (X) on the intention to do tourism (Y). As can be seen in Table 6, the direct effect of X on Y is not significant, but both the X-M relationship and the M-Y relationship are statistically

Table 6 Structural rel	Table 6 Structural relationships tested								
Exogenous variable	Mediating variable	Endogenous variable	Unstandardized loading	SE	Р	Standardized loading			
Direct relationships Facility for relationships	\rightarrow	Social interaction	0.241	0.039	0.000	0.446			
Facility for relationships	\rightarrow	Social isolation	-0.395	0.051	0.000	-0.486			
Facility for relationships	\rightarrow	Intention to travel	0.007	0.081	0.929	0.006			
Social isolation Social interaction	$\begin{array}{c} \longrightarrow \\ \longrightarrow \end{array}$	Intention to travel Intention to travel	- <i>0.016</i> 0.988	<i>0.182</i> 0.294	<i>0.930</i> 0.000	− <i>0.010</i> 0.431			
Indirect relationships Facility for relationships	Social interaction	Intention to travel	0.245	_	_	0.197			
Note: The indices present Source: Research data	ited in italics refer to no	n-significant (P < 0.05) rela	ationships						

significant, which confirms the indirect influence of social interaction on the intention of tourism.

Final comments

The desire to travel is considered a cognitive-emotional event, influenceable by incentive or aversion, where a person who wishes to travel is unable to do so for reasons beyond their control (Mitev and Irimiás, 2021). One possible factor that functions as an impetus to travel lies in the desire to break away from the feeling of social isolation that is stemming from everyday life (Pearce, 1982). Thus, the purpose of the study was to assess the influence of social isolation disorder and loneliness on participants' predisposition to undertake tourism travel.

The results point out that social isolation is not monolithic and that it can be better understood through two dimensions: a factor referring to the individual and his/her personality, here treated as social isolation itself, and another dimension referring to group coexistence, here treated as social conviviality. The supported hypotheses show that the ease with which people can relate to each other is an important antecedent of group living and contributes significantly to reducing social isolation. And it reveals that social coexistence is a qualified facilitator of the propensity to travel on vacation by directly influencing that attitude. In summary, social isolation and loneliness do not hinder the intention to travel for tourism, and this relationship does not depend on the gender of the person; however, more social people tend to have a greater propensity to travel for tourism.

The research was conducted before the pandemic of COVID-19, so considering that the tourism industry has an adaptive and resilient nature (Jin *et al.*, 2022), changes people's psychological needs, which may have also affected their predisposition to travel. The factors affecting intention and behavior, remain a fertile and complex field of research, most notably regarding the overall effects of the pandemic on travel intention (Li *et al.*, 2021).

Our results make interesting contributions from a theoretical point of view, such as the negative psychological factors, like social isolation and loneliness, which are not impediments to undertaking tourism travel. In particular, the state of isolation and loneliness are sensitive to a sudden change in behavior, such as the desire for interaction in response to loneliness. Second, by integrating social interactions, this study provides a framework for understanding that different types of social exchanges play an important role in the customer's perspective. Furthermore, the study provided empirical support to understand that the influence of social isolation is sensitive to social interaction, which reinforces the importance of examining the role of social interaction experienced by tourism. This brings an alternative explanation to understanding and revisiting travel intentions, that is, social interaction theory manifests itself as an important contributor to decreasing social isolation.

Psychological factors are positively associated with travel, such as previous positive experiences, the context of tourism experience demonstrates create socialization that reduces isolation and improves the intention to travel. Therefore, as a practical contribution, tourism industry professionals should focus on subjective strategies for tourist well-being, since the decision to travel is associated with cognitive factors that influence people's judgment and decision-making.

The main limitation of this work is the fact that the sample was non-probabilistic and had as corpus only people who were part of the researchers' contact network. Another limiting factor is the fact that the survey was electronic, which made it impossible for people who did not have access to the Internet to participate during the data collection period. In addition, our results may have been shaken by the advent of the pandemic with the restrictions on travel and social iteration, these changes may have caused changes in social behaviors such as the intention to travel.

As a suggestion for research, it is recommended that similar research could be conducted in other locations, and with additional negative psychological variables, to test, for example, whether negative psychological variables are in fact impediments to people traveling for tourism.

References

Argyle, M., Furnham, A. and Graham, J.A. (1981), *Social Situations*, Cambridge University Press, London.

Aroeira, T., Dantas, A.C. and Gosling, .de M.S. (2016), "Experiência turística memorável, percepção cognitiva, reputação e lealdade ao destino: um modelo empírico", *Turismo: Visão e Ação*, Vol. 18, pp. 584-610, doi: 10.14210/rtva.v18n2.p584-610.

Bagozzi, R.P. and Phillips, L.W. (1982), "Representing and testing organizational theories: a holistic construal", *Administrative Science Quarterly*, Vol. 27 No. 3, pp. 459-489, doi: 10.2307/2392322.

Biordi, D.L. and Nicholson, N.R. (2013), "Social isolation", in Lubkin, I.M. and Larsen, P.D. (Eds), *Chronic Illness: Impact and Interventions*, Jones & Bartlett Learning, Burlington, MA, pp. 97-132.

Brown, G.T.L. (2006), "Teachers' conceptions of assessment: validation of an abridged version", *Psychological Reports*, Vol. 99 No. 1, pp. 166-170, doi: 10.2466/PR0.99.1.166-170.

Byrne, B.M. (2001), "Structural equation modeling With AMOS, EQS, and LISREL: comparative approaches to testing for the factorial validity of a measuring instrument", *International Journal of Testing*, Vol. 1 No. 1, pp. 55-86, doi: 10.1207/s15327574ijt0101_4.

Çakar, K. (2021), "Tourophobia: fear of travel resulting from man-made or natural disasters", *Tourism Review*, Vol. 76 No. 1, doi: 10.1108/TR-06-2019-0231.

Caldito, L.A., Dimanche, F., Vapnyarskaya, O. and Kharitonova, T. (2015), "Tourism management", in Dimanche, F. and Caldito, L.A. (Eds), *Tourism in Russia: A Management Handbook*, Emerald pp. 57-99.

Campagne, D.M. (2019), "Stress and perceived social isolation (loneliness)", *Archives of Gerontology and Geriatrics*, Vol. 82, pp. 192-199, doi: 10.1016/j.archger.2019.02.007.

Cheung, C., Takashima, M., Choi, H., Yang, H. and Tung, V. (2021), "The impact of COVID-19 pandemic on the psychological needs of tourists: implications for the travel and tourism industry", *Journal of Travel and Tourism Marketing*, Vol. 38 No. 2, pp. 155-166, doi: 10.1080/10548408.2021.1887055.

Correia, A. and Pimpão, A. (2008), "Decision-making processes of portuguese tourist travelling to South america and africa", *International Journal of Culture, Tourism and Hospitality Research*, Vol. 2 No. 4, pp. 330-373, doi: 10.1108/17506180810908989.

Decrop, A. (2000), "Personal aspects of vacationers' decision making processes: an interpretivist approach", *Journal of Travel and Tourism Marketing*, Vol. 8 No. 4, pp. 59-68, doi: 10.1300/J073v08n04_04.

Delener, N. (2010), "Current trends in the global tourism industry: evidence from the United States", *Revista de Administração Pública*, Vol. 44 No. 5, pp. 1125-1137, doi: 10.1590/S0034-76122010000500006.

Dragouni, M., Filis, G., Gavriilidis, K. and Santamaria, D. (2016), "Sentiment, mood and outbound tourism demand", *Annals of Tourism Research*, Vol. 60, pp. 80-96, doi: 10.1016/j.annals.2016.06.004.

Etikan, I., Musa, S.A. and Alkassim, R.S. (2016), "Comparison of convenience sampling and purposive sampling", *American Journal of Theoretical and Applied Statistics*, Vol. 5 No. 1, pp. 1-4, doi: 10.11648/j. ajtas.20160501.11.

Fennell, D.A. (2017), "Towards a model of travel fear", *Annals of Tourism Research*, Vol. 66, pp. 140-150, doi: 10.1016/j.annals.2017.07.015.

Ferreira, D., Santos, A.J., Ribeiro, O., Freitas, M., Correia, J.V. and Rubin, K. (2013), "Social isolation and feelings of loneliness in young adolescents", *Analise Psicologica*, Vol. 31, pp. 117-127, doi: 10.14417/ap.591.

Gaumer, C.J. and Lafief, W.C. (2005), "Social facilitation", *Journal of Food Products Marketing*, Vol. 11 No. 1, pp. 75-82, doi: 10.1300/J038v11n01_05.

Gierveld, J. D J., Tilburg, T.V. and Dykstra, P.A. (2006), "Loneliness and social isolation", in Vangelisti, A.L. and Perlman, D. (Eds), *The Cambridge Handbook of Personal Relationships*, Cambridge University Press, New York, NY, pp. 485-500.

Hawthorne, G. (2006), "Measuring social isolation in older adults: development and initial validation of the friendship scale", *Social Indicators Research*, Vol. 77 No. 3, pp. 521-548, doi: 10.1007/s11205-005-7746-y.

Huang, S. and Hsu, C.H. (2009), "Travel motivation: linking theory to practice", *International Journal of Culture, Tourism and Hospitality Research*, Vol. 3 No. 4, pp. 287-295, doi: 10.1108/17506180910994505.

Hultman, M., Skarmeas, D., Oghazi, P. and Beheshti, H.M. (2015), "Achieving tourist loyalty through destination personality, satisfaction, and identification", *Journal of Business Research*, Vol. 68 No. 11, pp. 2227-2231, doi: 10.1016/j.jbusres.2015.06.002.

Jin, X., Bao, J. and Tang, C. (2022), "Profiling and evaluating Chinese consumers regarding post-COVID-19 travel", *Current Issues in Tourism*, Vol. 25 No. 5, pp. 745-763, doi: 10.1080/13683500. 2021.1874313.

Kuhn, F., Kock, F. and Lohmann, M. (2022), "The impact of the SARS-CoV-2 pandemic on tourists' personal prestige – an experimental study", *International Journal of Culture, Tourism and Hospitality Research*, Vol. 16 No. 1, pp. 238-258, doi: 10.1108/IJCTHR-02-2021-0035.

Li, J., Nguyen, T.H.H. and Coca-Stefaniak, J.A. (2021), "Understanding post-pandemic travel behaviours – China's golden week", *Journal of Hospitality and Tourism Management*, Vol. 49, pp. 84-88, doi: 10.1016/j.jhtm.2021.09.003.

McPherson, M., Smith-Lovin, L. and Brashears, M.E. (2006), "Social isolation in America: changes in core discussion networks over two decades", *American Sociological Review*, Vol. 71 No. 3, pp. 353-375, doi: 10.1177/000312240607100301.

Marconi, M. D A. and Lakatos, E.M. (2017), Metodologia Científica, 7th ed. Atlas, São Paulo.

Mitev, A.Z. and Irimiás, A. (2021), "Travel craving", Annals of Tourism Research, Vol. 90, doi: 10.1016/j. annals.2020.103111.

Murphy, L. (2001), "Exploring social interactions of backpackers", *Annals of Tourism Research*, Vol. 28 No. 1, doi: 10.1016/s0160-7383(00)00003-7.

Netto, L. D A., Moura, M.A.V., Queiroz, A.B.A., Leite, F.M.C. and Silva, G.F. (2017), "Isolation of women in situation of violence by intimate partner: a social network condition", *Escola Anna Nery – Revista de Enfermagem*, Vol. 21 No. 1, doi: 10.5935/1414-8145.20170007.

Nilashi, M., Samad, S., Manaf, A.A., Ahmadi, H., Rashid, T.A., Munshi, A., Almukadi, W., Ibrahim, O. and Hassan Ahmed, O. (2019), "Factors influencing medical tourism adoption in Malaysia: a DEMATEL-Fuzzy TOPSIS approach", *Computers and Industrial Engineering*, Vol. 137, doi: 10.1016/j. cie.2019.106005.

Pearce, P.L. (1982), The Social Psychology of Tourist Behaviour, Pergamon Press, England.

Perez Neider, D., Fuse, M. and Suri, G. (2019), "Cockroaches, performance, and an audience: reexamining social facilitation 50 years later", *Journal of Experimental Social Psychology*, Vol. 85, doi: 10.1016/j.jesp.2019.103851.

Rodrigues, A. and Mallou, J. (2014), "A influência da motivação na intenção de escolha de um destino turístico em tempo de crise económica", *International Journal of Marketing, Communication and New Media*, Vol. 2, pp. 5-42.

Samek, A., Cowell, J.M., Cappelen, A.W., Cheng, Y., Contreras-Ibáñez, C., Gomez-Sicard, N., Gonzalez-Gadea, M.L., Huepe, D., Ibáñez, A., Lee, K., Malcolm-Smith, S., Salas, N., Selcuk, B., Tungodden, B., Wong, A., Zhou, X. and Decety, J. (2020), "The development of social comparisons and sharing behavior across 12 countries", *Journal of Experimental Child Psychology*, Vol. 192, doi: 10.1016/j.jecp.2019.104778.

San Martín, H. and Herrero, Á. (2012), "Influence of the user's psychological factors on the online purchase intention in rural tourism: integrating innovativeness to the UTAUT framework", *Tourism Management*, Vol. 33 No. 2, pp. 341-350, doi: 10.1016/j.tourman.2011.04.003.

Santos, G. and Giraldi, J. (2016), "Desenvolvimento e validação de uma escala direta para mensuração de atitudes relativas a destinos turísticos", *Turismo – Visão e Ação*, Vol. 18 No. 1, pp. 134-163, doi: 10.14210/rtva.v18n1.p134-163.

Steinmetz, J. and Pfattheicher, S. (2017), "Beyond social facilitation: a review of the far-reaching effects of social attention", *Social Cognition*, Vol. 35 No. 5, pp. 585-599, doi: 10.1521/soco.2017.35.5.585.

Szopiński, T. and Staniewski, M.W. (2016), "Socio-economic factors determining the way e-tourism is used in European union member states", *Internet Research*, Vol. 26 No. 1, pp. 2-21, doi: 10.1108/IntR-03-2014-0065.

Vandervoort, D. (2000), "Social isolation and gender", *Current Psychology*, Vol. 19 No. 3, doi: 10.1007/s12144-000-1017-5.

Zajonc, R.B., Heingartner, A. and Herman, E.M. (1969), "Social enhancement and impairment of performance in the cockroach", *Journal of Personality and Social Psychology*, Vol. 13 No. 2, pp. 83-92, doi: 10.1037/h0028063.

Zhao, X., Lynch, J.G. and Chen, Q. (2010), "Reconsidering baron and kenny: myths and truths about mediation analysis", *Journal of Consumer Research*, Vol. 37 No. 2, pp. 197-206, doi: 10.1086/651257.

Appendix

/ariables	Sex	N	Mean	SD	Standard error	Sig
variables	Jex	7.V	ivicari	30	error	Sig.
t is easy for me to establish relationships with other people	Female	178	4.79	1,158	0.087	0.93
	Male	112	4.80	1,130	0.107	
feel isolated from other people	Female	178	3.10	1,040	0.078	0.63
· ·	Male	112	3.04	1,022	0.097	
have someone to share my feelings with	Female	178	4.58	1,475	0.111	0.89
· · · ·	Male	112	4.56	1,327	0.125	
t is easy for me to contact other people when I need help	Female	178	4.37	1,377	0.103	0.27
	Male	112	4.54	1,229	0.116	
When I am with other people, I feel apart from them	Female	178	2.97	1,178	0.088	0.67
	Male	112	2.91	991	0.094	
feel alone and without friends	Female	178	3.09	1,320	0.099	0.41
	Male	112	2.96	1,177	0.111	
Now I feel [fully insulated] - [fully inserted]	Female	178	3.96	999	0.075	0.57
	Male	112	3.89	1,025	0.097	
certainly [will not travel] - [will travel] during the next vacation	Female	178	4.58	1,539	0.115	0.0
	Male	112	4.96	1,237	0.117	

Corresponding author

Jonas Fernando Petry can be contacted at: jonasfernandopetry@gmail.com