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Influence of trust and perceived value on the intention to purchase travel online: Integrating the effects of assurance on trust antecedents

Enrique Bonsón Ponte [a, 1], Elena Carvajal-Trujillo [b, *], Tomás Escobar-Rodríguez [a, 2]

[a] Department of Accounting and Information Systems, University of Huelva, Plaza de la Merced, 21002 Huelva, Spain
[b] Department of Business Administration and Marketing, University of Huelva, Plaza de la Merced, 21002 Huelva, Spain

HIGHLIGHTS

- We analyze the effects of assurance on trust antecedents in travel website.
- Trust depends on perceived information quality and perceived security.
- Security is mainly affected by reputation, investment, third-party assurance seals.
- Online purchase intention is influenced by perceived value and trust.

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ABSTRACT

This paper proposes a model for the formation of online purchase intention based on perceived value, trust and the antecedents of perceived security and privacy, using the model proposed by Ray, Ow, and Kim (2011) extended to cover third-party assurance seals and related constructs, and examines the influence on trust of consumers' perceived information quality, privacy, and security. A total of 451 individuals participated in an experiment. The partial least squares technique was applied to data collected via a questionnaire to test the proposed model. The results indicate that online purchase intention depends on perceived value and trust. The main predictors of perceived trust are perceived information quality and perceived security. Consumers' perceived security depends on vendor reputation, website investment, third-party assurance seals, understanding of third-party seals, privacy and security policies, familiarity with the website, Internet privacy concerns, and disposition towards third-party certification.

1. Introduction

The Internet and information communication technology are leading to great developments in the tourism industry (Buhalis & Law, 2008). The Internet is ideal for the tourism industry because of the characteristics of tourism products (McCole, 2002): 1) they are intangible, 2) their production and consumption cannot be separated, 3) they are perishable, and 4) they are seasonal. Moreover, the Internet is used in the tourism industry when users search for information and enter into online transactions (Kim, Chung, & Lee, 2011). Internet technology allows suppliers of travel products to sell their products anywhere and at any time (Bernstein & Awe, 1999; Connolly, Olsen, & Moore, 1998; Law & Wong, 2003; Llach, Mariomon, Alonso-Almeida, & Bernardo, 2013). Online transactions represent a new stage in the tourism industry, which is working to develop better commercial practices (Kim et al., 2011). Some of the attributes associated with e-commerce that have brought about a modification of commercial transactions are convenience, economic cost, and product diversity (Yoon, 2002).

Although the number of Internet users has substantially increased, many users do not make purchases online. They are reluctant to provide personal information and/or transactional information for electronic payments online because they do not trust e-commerce (Kim et al., 2011; Kim, Ferrin, & Rao, 2008). A study of e-commerce showed that more than 87% of users were concerned about security and privacy protection in online shopping (Ray, Ow, & Kim, 2011). In addition, the lack of perceived privacy and security protection is a major reason why many consumers choose not to shop online; trust therefore plays a relevant role in online transactions (Kim et al., 2011; Wu & Chang, 2005). In this general context, previous studies have analyzed trust in e-commerce

* Corresponding author.
E-mail addresses: bonson@uhu.es (E. Bonsón Ponte), carvajal.trujillo@dem.uhu.es (E. Carvajal-Trujillo), tescobar@uhu.es (T. Escobar-Rodríguez).
[1] Tel./fax: +34 959217892x7850.
[2] Tel./fax: +34 959217895x7850.

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together with other factors (Cyr, 2008, 2013; Cyr, Kindra, & Dash, 2008; Harris & Goode, 2004; Jin, Park, & Kim, 2007; Kim et al., 2008; Kim, Xu, & Gupta, 2012; McKnight & Chervany, 2001; Wu, Hu, & Wu, 2010). Previous research in e-commerce has examined the antecedents of perceived privacy and/or perceived security (Li, 2014; Lowry et al., 2011; Ray et al., 2011). Ray et al. (2011), besides studying these antecedents, analyzed the influence of perceived privacy and security on consumers' perceived trust in online transactions.

In the tourism context, trust has also been proved to be one of the most relevant variables that makes e-business successful in the travel industry (Kim et al., 2011), the accommodation industry (specifically hotels and resorts) (Fam, Foscht, & Collins, 2004), and the air travel industry, both in general (Kim, Kim, & Shin, 2009) and for low-cost carriers (LCCs) and in particular (Escobar-Rodríguez & Carvajal-Trujillo, 2014). Kim et al. (2011) tried to examine the factors influencing trust (navigation functionality, perceived security, and transaction cost) and the effect of trust and satisfaction on loyalty in online shopping for travel products in South Korea. Escobar-Rodríguez and Carvajal-Trujillo (2014) examined the factors influencing the intention to use LCC e-commerce websites to purchase tickets in Spain, analyzing, among other variables, the influence of perceived privacy, perceived security, and information quality on consumer trust in the website. Kim et al. (2009) studied the determinants of e-commerce on airline e-commerce websites, on the basis of the technology acceptance model (TAM), and trust and subjective norms in South Korea.

Few studies in the field of tourism and e-commerce analyze the antecedents of perceived privacy and/or perceived security. Although studies have examined consumers' perceived value and purchase intentions (Llach et al., 2013), and their trust and purchase intentions (Kim et al., 2011), none have examined the effect of perceived trust on perceived value in the field of e-commerce and tourism. Furthermore, Kim et al. (2011) noted that there is little research regarding online consumers' perceived trust in travel products. In this study, we analyze the antecedents of perceived security and privacy, extending the model proposed by Ray et al. (2011) by adding a new factor, consumers' perception of third-party assurance seals, and two constructs related to this, the disposition towards third-party certification and the understanding of third-party seals. In addition, using the model proposed by Kim et al. (2012), we examine the influence of trust on perceived value, and the influence of these two factors on purchase intention.

We have extended the model to include third-party assurance seals and the related constructs following the recommendations of Özpolat, Gao, Jank, and Viswanathan (2013); these authors stated that there are very few studies examining the role of third-party mechanisms in helping to increase trust in e-commerce, unlike the position for the third-party certification mechanisms that exist in offline settings. Among the few studies that address the issue, Xu, Teo, Tan, and Agarwal (2010) in the general context, and Lee and Cranage (2011) in the context of tourism and e-commerce, concluded that the use of privacy seals, such as TRUSTe, increases reliability in relation to privacy protection and information disclosure. Lee and Cranage (2011) analyzed how privacy assurance and personalization affect both consumers' perceptions of value and their privacy concerns, in the context of travel websites. They found that privacy assurance statements and the use of security symbols increase perceived privacy protection and perceived trust.

In this study, we used the model proposed by Ray et al. (2011) for three reasons. First, it presents a current integrated framework to study the influence of signals such as third-party assurance seals on travel websites and the influence of different consumer predispositions on perceived security and privacy protection in online transactions. Second, Ray et al. (2011) suggest further research to determine whether the personal predispositions included, but not found to be significant, in their model, could influence perceived security and privacy if they are analyzed together with other predispositions. Third, Ray et al. indicate the need to research whether signals from websites influence online services other than the general retail websites that they analyze.

With this in mind, this study aims: 1) to examine the influence of perceived trust and perceived value on the intention to use e-commerce websites when shopping for travel products; 2) to analyze the influence of privacy and security signals and the personal predispositions of consumers on perceived privacy and perceived security; and 3) to assess the effect of information quality, perceived security, and perceived privacy on consumer trust in a website.

The remainder of the paper is structured as follows. In the next section, we provide a literature review and propose our working hypotheses. Following that, we describe the research methodology. The results are then presented, and finally we provide our conclusions and the implications for future research.

2. Literature review

2.1. Perceived trust, perceived privacy, perceived security, information quality, and the relationships between them

Trust in websites plays an important role in e-commerce, because consumers are unlikely to shop online if they do not trust the seller's website on which they are shopping (Gefen, 2002; Jarvenpaa, Tractinsky, Saarinen, & Vitale, 1999; Kim et al., 2008, 2011). Studies have analyzed the factors that can influence consumers' perceived trust, and these help tourism product managers to design their websites in such a way that consumers perceive the transactions to be reliable. In this research, we examine, in relation to travel websites, the antecedents of trust that, according to Kim et al. (2008), are related to consumers' perceptions, such as security protection, privacy protection, and the quality of the information given on the website. We analyze these factors for travel websites because only a few previous studies have examined the antecedents of trust (Escobar-Rodríguez & Carvajal-Trujillo, 2014; Kim et al., 2008, 2011). Escobar-Rodríguez and Carvajal-Trujillo (2014) confirm that previous studies have indicated that these antecedents are very relevant for e-commerce (Au Yeung & Law, 2003; Flavian & Cuinaliu, 2006; Kim et al., 2011; Wong & Law, 2005). In e-commerce, it is difficult to gauge whether online sellers will meet their commitment to protect the privacy of consumers' personal information (McKnight, Choudhury, & Kacmar, 2002) and/or the security of online transactions (Kim et al., 2008). Additionally, the content of sellers' websites can affect consumers' perceived trust (Vila & Kuster, 2011). Hence, it is relevant for online sellers to establish trusted transaction processes so that consumers place trust in them and consequently form an online purchase intention (Grabosky, 2001).

The definition of trust is complicated because it is an abstract and complex factor. The literature gives various definitions of trust (Corbitt, Thanasankit, & Yi, 2003; Gefen, Karahanna, & Straub, 2003). In the field of e-commerce, according to Pavlou (2003), trust is the belief that renders consumers vulnerable to the good faith of online sellers after learning of their characteristics. Gefen (2000) conceives of trust in a very similar way, as a general belief in an online seller that results in a behavioral intention. Another definition of trust in this context is provided by Kim et al. (2008); they define trust as the subjective belief that the online seller will fulfill its transactional obligations, as those obligations are understood by the consumer. In this paper, we use this last definition.

The information quality antecedent can be conceived as the consumers' general perception about the completeness and accuracy of the website information concerning both the services offered and the procedure for carrying out an online purchase transaction (Kim et al., 2008). Then, depending on the quality of information on the website, a consumer may perceive that the site is or is not suitable for making the required online purchase correctly (Kim et al., 2008). In other words, when various websites contain information about similar products, the factor that induces consumers to opt for one particular website over the rest to make the required purchase is the quality of the information that the site is perceived to provide (Raganathan & Ganapathy, 2002). Thus, the greater consumers' perception that the website of an online seller contains high-quality information, the more likely they are to think that the website of the online seller is trustworthy (Kim et al., 2008).

Regarding the perceived security antecedent, this can be defined as the perception of consumers that the online seller has included the antecedents of security, such as verification, authentication, encryption, protection, and non-repudiation (Kim et al., 2008). Chellappa and Pavlou (2002) noted that if consumers perceive that the website of the online seller offers security factors such as a security policy, a safe shopping guarantee, and other protection mechanisms, they will deduce that the online seller guarantees the security of an online purchase. Thus, the greater consumers' perception that the website of an online seller guarantees security during online transactions, the more likely they are to perceive that the website of the online seller is trustworthy (Kim et al., 2008).

The perceived privacy protection antecedent can be conceptualized as the probability that the online seller will ensure that the confidential information about the consumer acquired during the online transaction is protected against unauthorized disclosure or use (Kim et al., 2008). During an online transaction, the online seller requests and collects a large amount of personal information about the consumer, such as his or her name, home address, phone number, email address, bank account and credit card details; the consumer may suspect that the online seller will give or sell this information to other entities, companies and persons (Kim et al., 2008). Faced with the possibility of this occurring, the consumer may decide against purchasing online – the consumer has lacks confidence that the online seller will properly protect his or her privacy.

In the field of e-commerce, Kim et al. (2008) confirmed the relationship between information quality, perceived security, and perceived privacy protection and trust. In the context of tourism and e-commerce, Escobar-Rodríguez and Carvajal-Trujillo (2014) examined the effect of information quality, perceived security and perceived privacy protection on trust. Thus, for travel websites that sell travel products, information quality, perceived security, and perceived privacy protection will almost certainly affect consumers' trust.

Based on the previous evidence, we formulate the following hypotheses for travel websites:

H01. Consumers' perception of the quality of website information has a positive effect on trust.

H02. Consumers' perception of website security protection has a positive effect on trust.

H03. Consumers' perception of website protection of privacy has a positive influence on trust.

2.2. Antecedents of perceived privacy and perceived security

Although Ray et al. (2011) examined the factors influencing perceived privacy and perceived security, these factors have not been analyzed in the field of tourism. We decided to explore the antecedents of perceived privacy and perceived security in the field of tourism for travel products, because of the great influence of these factors on trust in the sales websites (Kim et al., 2009). Accordingly, we extend the model proposed by Ray et al. (2011) by incorporating third-party assurance seals and a couple of related constructs. Ray et al. (2011), as suggested by Gefen et al. (2003) and Kim and Benbasat (2003), differentiated the antecedents of privacy and security in response to the five sources that confer trust: 1) a consumer's personality; 2) knowledge based on a consumer's prior experiences; 3) institutional assurances from the online seller; 4) calculative assurances from the online seller; and 5) cognitive assurances from third parties. These five sources are grouped into two broad components: first, the consumers' individual predispositions regarding privacy and security signals; and second, privacy and security signals according to signaling theory (Table 1).

The first component, consumers' personal predispositions, refers to the factors that might predispose users to perceive privacy and security measures on the website of the online seller. Those factors are relevant because online sellers use a variety of tools to adhere to privacy and security standards, some of which are quite technical and are not always perceptible to consumers, such as encrypted transmissions, firewalls, and intrusion detection systems (Bhimani, 1996; Cavusoglu, Raghunathan, & Cavusoglu, 2009; Furnell & Karweni, 1999; Ray et al., 2011). Other tools, for example privacy and security policies, third-party certificates, and the emailing of the proof of purchase are implemented during the interaction with a user (Ray et al., 2011). Within the first component, we added to the two variables considered by Ray et al. (2011) (Internet privacy and security concerns and familiarity with the travel website), two others (disposition towards third-party certification and understanding of third-party assurance seals). The Internet privacy concerns and disposition towards third-party certification factors represent consumers' personality-based trust sources, because they refer to a consumer's predisposition to trust others and believe in their good intentions (Gefen et al., 2003; Ray et al., 2011). On the other hand, familiarity with the website and understanding of third-party assurance seals are consumers' knowledge-based trust sources (Table 1), the former because a consumer's familiarity with a seller's website reduces uncertainty (Gefen et al., 2003; Kim et al., 2008), and the latter because a consumer's understanding of the seals displayed on a seller's website increases his or her trust. Internet privacy concerns refer to the propensity to be generally concerned about threats to personal information submitted over the Internet and/or the safety of payments in online transactions (Dinev & Hart, 2006; Malhotra, Kim, & Agarwal, 2004; Ray et al., 2011; Sheehan & Hoy, 2000; Smith, Milberg, & Burke, 1996). According to Ray et al. (2011), familiarity

Table 1
Antecedents of consumers' perceived privacy and security.

	Factors	Source of trust	Origin
Predispositions	Internet privacy concern	Personality	NA
	Familiarity with the website	Knowledge	NA
	Disposition to third-party certification	Personality	NA
	Understanding of third-party assurance seals	Knowledge	NA
Security signals	Privacy and security policies	Institution	First-party
	Website investment	Calculative	First-party
	Vendor reputation	Cognitive	Second-party
	Third-party assurance seals	Institution	Third-party

NA = not available.

with the website includes the predisposition of consumers to trust online sellers based on their prior knowledge of those sellers.

The second component proposed by Ray et al. (2011), security/privacy signals, is based on signaling theory. This theory states that companies can perform actions and provide cues that give information about quality to customers, whether or not these signals are credible to and interpretable by the customers (Duncan & Moriarty, 1998; Rao, Qu, & Ruekert, 1999; Ray et al., 2011). Within this component, they include the factors used by online sellers to increase trust by providing institutional, calculative, and cognitive assurances (Gefen et al., 2003; Ray et al., 2011) (Table 1). These signals cannot directly influence the perceptions of consumers, because the quality of security and privacy is difficult for consumers to appreciate (Ray et al., 2011). As noted by Wang, Beatty, and Foxx (2004), online sellers utilize different strategies to signal their trustworthiness and to ease consumers' concerns over e-commerce (Wu et al., 2010). Thus, consumers should rely on indirect cues, or signals, to assess the level of quality (Ray et al., 2011; Zeithaml, 1988). Ray et al. (2011) included three signals from online sellers that could affect perceived privacy and security: privacy and security policies, perceived website investment, and the reputation of the online seller. In our model, we add a fourth signal, third-party assurance seals. Privacy and security policies are statements provided by online sellers that supply information and claim that privacy and security are assured (Kim & Benbasat, 2003; Lowry et al., 2011; Ray et al., 2011). Schlosser, White, and Lloyd (2006) refer to the website investment made by the online seller in terms of the effort, time, and money spent on developing it. This investment signals the importance of security and privacy protection for the online seller, because the physical appearance of products has always been a signal of quality (Dawar & Parker, 1994; Ray et al., 2011). Privacy and security policies and website investments are first-hand quality information sources about the seller's website, provided directly by the online seller (Özpolat et al., 2013). Regarding the reputation of the online seller, Ray et al. (2011) considered that second-party information on sellers is a signal of quality, indicating privacy and security protection to consumers (Duncan & Moriarty, 1998; Gefen et al., 2003). The reputation of the online seller provides quality information about the seller's website, and is based on the experience of previous shoppers, that is, a second-party information source (Özpolat et al., 2013).

In accordance with the constructs and relationships of the model proposed by Ray et al. (2011), as well as the previous evidence, we suggest, in the context of tourism and e-commerce for travel websites, the following hypotheses regarding consumers' perceived privacy and security:

H04. Internet privacy concern negatively influences consumers' perception of website security protection.

H05. Internet privacy concern negatively influences consumers' perception of website privacy protection.

H06. Familiarity with the seller's website positively influences consumers' perception of website security protection.

H07. Familiarity with the seller's website positively influences consumers' perception of website privacy protection.

H08. Privacy and security policies positively influence consumers' perception of website security protection.

H09. Privacy and security policies positively influence consumers' perception of website privacy protection.

H10. Perceived website investment positively influences consumers' perception of website security protection.

H11. Perceived website investment positively influences consumers' perception of website privacy protection.

H12. The online seller's reputation positively influences consumers' perception of website security protection.

H13. The online seller's reputation positively influences consumers' perception of website privacy protection.

2.2.1. Third-party assurance seals

Third-party assurance seals (e.g., TRUSTe, VeriSign, BBBOnline) provide assurance to consumers that a website follows particular operating practices, that payments are secure, and/or that the privacy policy indicates what the seller can and cannot do with personal data collected online (Kim et al., 2008; Kim, Sivasailam, & Rao, 2004; Shapiro, 1987). According to Özpolat et al. (2013), companies that provide assurance seals examine the website's security, privacy, and service quality and, if these meet a number of quality standards, the seller is allowed to display the assurance seal. McKnight and Chervany (2001) argue that third-party seals are sources of trust based on institutional assurances (Table 1) and, as suggested by Jiang, Jones, and Javie (2008) and Kimery and McCord (2002a), they might increase consumers' perceived security and privacy.

A number of studies have analyzed the influence of third-party assurance seals on trust, but there is a lack of consensus on this (Özpolat et al., 2013). While some studies found a positive influence (Grazioli & Jarvenpaa, 2000; Jiang et al., 2008; Rifon, LaRose, & Choi, 2005; Yang, Hung, Sung, & Farn, 2006), others did not (Hui, Teo, & Lee, 2007; Kim et al., 2008; Kimery & McCord, 2002a; McKnight, Kacmar, & Choudhury, 2004; Metzger, 2006; Pennington, Wilcox, & Grover, 2003; Yousafzai, Pallister, & Foxall, 2005). On the other hand, very little is known about the effect of assurance seals on consumers' perceived security and/or privacy, except for the results of the studies of Kim and Kim (2011), who found a positive influence, and Lowry et al. (2011), who found that seals fail to increase consumers' perceived privacy. Furthermore, in the context of tourism and e-commerce, no study has analyzed either the impact of seals on trust or their impact on consumers' perceived security and privacy, so our study is the first to address those issues.

If consumers perceive, by means of signals such as third-party assurance seals, that the online seller provides security and privacy protection in online transactions, their perception of uncertainty and online shopping risks should tend to be reduced (Kim & Benbasat, 2003; Wu et al., 2010). In fact, seals should contribute to increasing consumers' privacy protection (Hoffman, Novak, & Peralta, 1999) and/or security protection (Udo, 2001). Thus, for online shopping for travel products, if third-party assurance seals are cues for security and privacy protection on the travel websites of online sellers, it can be hypothesized that displaying these assurance seals will positively influence consumers' perception of website privacy and security protection. Thus, this study suggests the following research hypotheses in the context of tourism and e-commerce for travel products:

H14. The presence of a third-party assurance seal positively influences consumers' perception of website privacy protection.

H15. The presence of a third-party assurance seal positively influences consumers' perception of website security protection.

2.2.2. Disposition towards third-party certificates

With this construct, we refer to the disposition to trust third-party certification such as seals. The disposition to trust is defined as a consumer personality trait that shows the degree to which

consumers are predisposed to perceive others as trustworthy (Jiang et al., 2008; Kim et al., 2008). This predisposition of consumers is based on the result of ongoing lifelong experiences with and knowledge of a certain trusted party (Kim et al., 2008; McKnight, Cummings, & Chervany, 1998). Therefore, if a consumer has a high inclination to trust others in general, this disposition is likely to have a positive influence on her or his trust in a particular seller, and if she or he has a low inclination to trust others in general, she or he is likely to develop a lower level of trust in a particular seller (Kim et al., 2008; McKnight et al., 1998). The influence of the disposition to trust on trust has been studied in the general literature (Kim et al., 2008; Kimery & McCord, 2002a; Mayer, Davis, & Schoorman, 1995; Wu et al., 2010). Jiang et al. (2008) proposed that the disposition to trust third-party certification has an influence on the perception of the identifying logos for third-party certification, and that this factor has an influence on online seller trust. The disposition to trust third-party certification is defined as the tendency to depend on third parties for trustworthy information during online transactions. If consumers have a high tendency to trust third-party certification, such as security and privacy protection assurances, this disposition is likely to have a positive effect on her or his perception of the privacy and security of the online seller. As noted by Wu et al. (2010), consumers with a higher disposition to trust are more credulous (Gefen, 2000), and they are more likely to trust online sellers displaying third-party assurance seals, increasing their perception of website security and privacy protection (Wu et al., 2010). Thus, for travel e-commerce websites for the purchase of travel products, consumers' disposition to trust third-party certification will almost certainly influence their trust in those websites. In this study, it is hypothesized that security and privacy protection will be related to the disposition towards third-party certification in tourism e-commerce products, as follows:

H16. Consumers' disposition towards third-party certification positively affects their perception of website security protection.

H17. Consumers' disposition towards third-party certification positively affects their perception of website privacy protection.

2.2.3. Understanding of third-party assurance seals

Lowry et al. (2011) suggested that an understanding of third-party assurance seals indicates that the consumer knows that his/her data are protected. Online sellers display third-party assurance seals on their websites to increase consumers' perception of website security and privacy protection; however, if the consumers do not understand the seals, it is useless to display them. In fact, McKnight et al. (2004) and Moores (2005) highlighted the fact that third-party assurance seals fail because consumers do not understand their forms or function; hence, it is necessary to study consumers' understanding of the seals. This factor was analyzed by Lowry et al. (2011), who also considered that the use of a third-party privacy assurance seal will not be effective if consumers do not understand it. In the context of tourism and e-commerce, it is also relevant that consumers understand the seals if they are to be useful. Given the relevance of the consumers' understanding of the seals for shopping for travel products, we propose the following research hypotheses:

H18. Consumers' understanding of third-party assurance seals positively influences their perception of website security protection.

H19. Consumers' understanding of third-party assurance seals positively influences their perception of website privacy protection.

2.3. Perceived value, perceived trust, purchase intention, and the relationships between them

On the basis of prospect theory (Kahneman & Tversky, 1979; Wang & Wang, 2010), we assume in this research that an overall judgment of value influences the online purchase intention. In the e-commerce context, perceived value can be defined as the consumer's assessment of benefits against costs when shopping with an online seller (Zeithaml, 1988). Consequently, the perceived value of a transaction with an online seller is the net benefit (Kim et al., 2012; Seddon, 1997). Obviously, consumers wish to shop for products with those vendors who offer maximum value (Kim et al., 2012; Wang & Wang, 2010; Zeithaml, 1988). In fact, the literature has shown that the perceived value of a product influences the purchase intention (Chang & Wildt, 1994; Dodds, Monroe, & Grewal, 1991). In the e-commerce context, studies have confirmed the relationship between perceived value and purchase intention (Chang & Wang, 2011; Fuentes-Blasco, Gil-Saura, Berenguer-Contrí, & Moliner-Velázquez, 2010; Kim et al., 2012; Wu, Chen, Chen, & Cheng, 2014). In the tourism e-commerce field, Llach et al. (2013) examined the influence of perceived value on intention in the purchasing of airline tickets, concluding that the effect is significant and positive. Thus, this study proposes the following hypothesis regarding online shopping for travel products:

H20. Perceived value on a website positively influences the online purchase intention.

According to Kim et al. (2012), if consumers have trust in an online seller, they expend less effort on searching for information about the online seller and on executing the online transaction. Perceived trust can decrease the transaction's non-monetary cost; this cost incorporates variables such as the time and effort required to choose an online seller (Chiles & McMackin, 1996) and the perceived risk of online shopping (Jarvenpaa, Tractinsky, & Vitale, 2000; Kim et al., 2012). As perceived trust reduces the non-monetary cost, it raises the perceived value when shopping online on a seller's website (Kim et al., 2012). Only Kim et al. (2012), in the e-commerce context, have examined the influence of perceived trust on perceived value, and they confirmed this influence. There is no study examining this relationship in the field of tourism and e-commerce. For our research, for shopping online for travel products, consumers' perceived trust in travel websites will reduce the non-monetary cost and this will raise the perceived value of the online shopping. In our study, we hypothesize that perceived trust has an influence on perceived value as follows:

H21. Trust in an online seller positively affects the perceived value for customers.

In the e-commerce field, several previous studies have confirmed the relationship between trust and the intention to purchase online (Chiu, Huang, & Hui, 2010; Gefen et al., 2003; Grazioli & Jarvenpaa, 2000; Jarvenpaa et al., 2000; Kim et al., 2008, 2012). In the field of tourism and e-commerce, this relationship has also been analyzed, and the conclusion has been reached that the influence is significant and positive (Bigné, Sanz, Ruiz, & Aldás, 2010; Escobar-Rodríguez & Carvajal-Trujillo, 2014; Kamarulzaman, 2007; Kim et al., 2009, 2011; Sanz-Blas, Ruiz-Mafé, & Pérez Pérez, 2014; Wen, 2009, 2010). Thus, for online shopping for travel products, we hypothesize:

H22. Trust positively affects the online purchase intention.

Fig. 1 graphically represents the different research hypotheses.

3. Methodology

3.1. Measurements

A set of measurement items was adapted to the specific context of this research, and a total of 55 items was obtained. In Table 2, we present the complete list of items, which were measured by means of multi-item scales, for the constructs taken into account in this research. The responses of the survey participants to each of the items were measured on a seven-point Likert scale, ranging from 1 (= "strongly disagree") to 7 (= "strongly agree"). This is the usual way of measuring variables that are not directly quantifiable or observed (Churchill & Iacobucci, 2002).

The items in the questionnaire were validated on the basis of the opinions of a focus group of e-commerce and e-tourism academics and professionals, who were asked whether the items were appropriate for the purpose of evaluating e-commerce and trust. The focus group's opinions led us to modify some items to make the meanings clearer. A pre-test was carried out on 40 individuals of different ages and genders, selected by quota and convenience sampling, who had purchased travel products on a website in the past year. This ensured that those individuals who had not purchased travel products in the past year were dropped from the pre-test. Using the feedback from this pre-test, modifications were made to the wording of some items to increase the clarity further, but these were only minor. A final questionnaire was created and administered to 30 individuals of different genders and ages, selected by quota and convenience sampling, who had purchased travel products on a website in the past year. The clarity of the questionnaire was thus confirmed, and no more changes were made to it.

The questionnaire was originally drafted in English, but it was intended for use in Spanish for consumers from Spain who had experience of purchasing tourism products on websites. Therefore, the English questionnaire was translated into Spanish by a professional native English translator and by researchers, working independently. After a careful analysis of the differences between these independently translated questionnaires, a definitive version of the Spanish questionnaire was agreed. This final version was then translated back into English by another native English professional translator to ensure consistency between the English and the Spanish version of the questionnaire (Brislin, 1970). Table 2 shows the items for this study and the supporting literature for each construct.

3.2. Sample and data collection

This study used quota and convenience sampling. The convenience sampling method was utilized because the population size is unknown for this study (San Martín & Herrero, 2012). The quota sampling method was employed to match the target population structure in both age and gender (Kim et al., 2009, 2011; San Martín & Herrero, 2012). To calculate the number of participants that would be sufficient in each age and gender category, population data were obtained from the 15th Internet users survey (AIMC, 2013), a study carried out by the Asociación para la Investigación de Medios de Comunicación (Table 3). Afterwards, to combine the diverse quotas, convenience sampling was carried out (San Martín & Herrero, 2012). Males and females are represented as follows: 67.8% and 32.2%, respectively. The age groups constitute the following: 5.8% aged under 20 years; 13.7% aged 20–24; 31.7% aged 25–34; 36.4% aged 35–44; 8.9% aged 45–54; 3.1% aged 55–64; and 0.4% aged 64 and over. Table 4 shows the data on the gender and age of the participants. There were more males (67.8%) than females (32.2%). The largest proportion of the respondents (36.4%) were aged between 35 and 44, followed by those aged between 25 and 34 (31.7%).

The participants were recruited by email among the community of our university. We emailed an invitation to participate in our research to current students, alumni, faculty members, and staff,

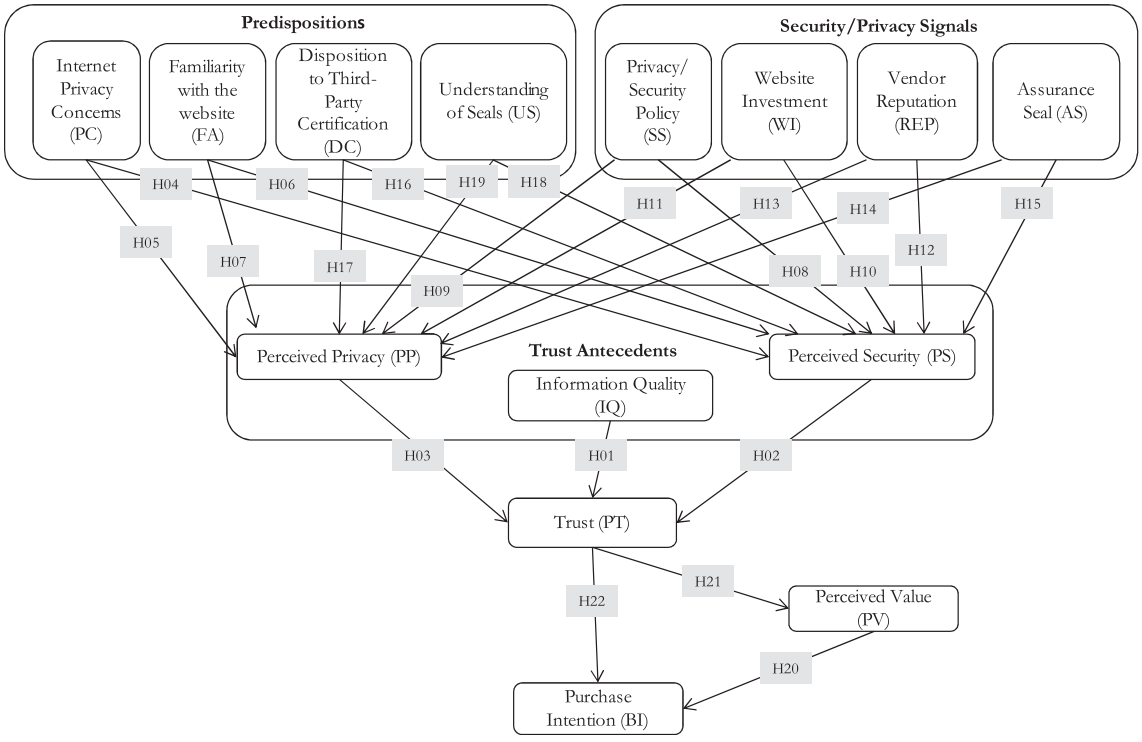

Fig. 1. Proposed model.

Table 2
Construct measurement.

Construct	Item	Supporting literature
Third-party assurance seal	AS1. The third-party assurance seals on this website make me feel more comfortable. AS2. The third-party assurance seals on this website make me feel more secure in terms of privacy. AS3. Third-party assurance seals on this website make me feel safer in terms of the transaction. AS4. The third party assurance seals on this website make me feel this website is secure.	Cyr (2013) Kim et al. (2008)
Purchase intention	BI1. The probability that I would consider to purchase a tourism product from this website is high. BI2. If I were to purchase a tourism product, I would consider purchasing it from this website. BI3. The likelihood of my purchasing a tourism product from this website is high. BI4. My willingness to purchase a tourism product from this website is high.	Kim et al. (2012)
Disposition to third-party certification	DC1. I specifically look for third-party certification symbols. DC2. I generally have faith in third-party certification. DC3. I generally trust third parties.	Jiang et al. (2008)
Familiarity with the website	FA1. I am familiar with this tourism product shopping website. FA2. I am familiar with the processes of purchasing products from this tourism product shopping website. FA3. I am familiar with searching for products at this tourism product shopping website.	Chiu, Hsu, Lai, and Chang (2012)
Information quality	IQ1. The tourism product website provides accurate information about the tourism product that I want to purchase. IQ2. The tourism product website provides sufficient information when I try to make a transaction. IQ3. The tourism product website provides enough depth of information about its products. IQ4. The information provided by tourism product website is helpful to me in purchasing tourism products. IQ5. The information in the tourism product website is clear for me to make a purchase. IQ6. The tourism product website provides up-to-date information.	Kuan et al. (2008)
Internet privacy concerns	PC1. Compared with other subjects on my mind, online privacy/security is very important. PC2. I am concerned about threats to online privacy/security today. PC3. The greater my interest to obtain a certain service or product from the Internet, the more I tend to suppress my privacy/security concerns.	Ray et al. (2011)
Perceived value	PV1. Considering the money I pay to purchase tourism products on this website, online shopping here is a good deal. PV2. Considering the effort I make in shopping on this website, online shopping here is worthwhile. PV3. Considering the risk involved in shopping on this website, online shopping here is of value. PV4. Overall, online shopping on this website delivers me good value.	Kim et al. (2012)
Vendor reputation	REP1. This company is well known. REP2. This company has a good reputation. REP3. This company has a good reputation in its market.	Ray et al. (2011)
Trust	PT1. This tourism product website has integrity. PT2. This tourism product website is reliable. PT3. This tourism product website is trustworthy.	Kim et al. (2011)
Perceived privacy[a]	PP1. I am concerned that tourism product website collects too much personal information from me. PP2. I am concerned that the tourism product website will use my personal information for other purposes without my authorization. PP3. I am concerned the tourism product website will share my personal information with other entities without my authorization. PP4. I am concerned that unauthorized persons (i.e. hackers) have access to my personal information. PP5. I am concerned about the privacy of my personal information during a transaction. PP6. I am concerned that the tourism product website will sell my personal information to others without my permission.	Kim et al. (2008)
Perceived security	PS1. The tourism product website implements security measures to protect users. PS2. The tourism product website usually ensures that transactional information is protected from accidentally being altered or destroyed during a transmission on the Internet. PS3. I feel secure about the electronic payment system of the tourism product website. PS4. I am willing to use my credit card on this website to make a purchase. PS5. I feel safe in making transactions on this website.	Kim et al. (2008)
Privacy and security policy	SS1. The availability of a privacy or a security statement was easily seen on the tourism product website. SS2. This tourism product website has a policy on privacy or security. SS3. I am aware of the details of this tourism product website's privacy or security policy.	Ray et al. (2011)
Understanding of seals	US1. Website assurance seals are designed to increase the privacy/security a customer has for a website. US2. Websites must state how they collect and share data in order to be awarded a website assurance seal. US3. Third-party organizations assess the business practices of a website before awarding a seal. US4. You can click on the seal to verify that the website is entitled to display the seal. US5. A website must display a data privacy and security statement in order to get a seal	Lowry et al. (2011)
Website investment	WI1. A lot of time seems to have been invested in developing this website. WI2. A lot of effort seems to have been invested in developing this website. WI3. A lot of money seems to have been invested in developing this website.	Ray et al. (2011)

[a] Reverse scaled.

Table 3
Quota sampling method in terms of gender and age.

		Sampling ($n = 451$)	
		Population[a] (%)	Sample (%)
Gender	Male	74.1	67.8
	Female	25.7	32.2
	No answer	0.2	0
	Total	100	100
Age in years	<20	3.4	5.8
	20–24	9.2	13.7
	25–34	28.5	31.7
	35–44	31.4	36.4
	45–54	16.6	8,9
	55–64	6.3	3.1
	≥65	1.7	0.4
	No answer	3.0	0
	Total	100	100

[a] AIMC (2013).

and they were also asked to forward the invitation to their friends and colleagues. An appointment for the computer lab was given to the participants who answered our email. Additionally, we invited people randomly selected outside the university to participate. Those who agreed to participate were given a pen drive with the university seal. Ahuja, Gupta, and Raman (2003) found that prior to a purchase individuals tend to visit one to three websites. Consequently, we replicated the work of Kim et al. (2008) by instructing respondents to select just two or three travel websites from which to make a purchase decision. The travel websites used were websites through which travelers can purchase travel products such as hotel bookings, airline tickets, and transportation reservations. As in the study conducted by Kim et al. (2011), we excluded cruises. Following the method of Kim et al. (2008), the participants were instructed, in the computer room, to go through the online purchasing process up to the clicking of the purchase button (this step was excluded). After surfing the websites, they were randomly assigned to one of two questionnaires: one questionnaire asked questions about the website from which the participant was less inclined to make a purchase; and the other questionnaire asked the same questions but about the website from which the user was more inclined to make a purchase. Accordingly, we could ensure that the purchase intention construct had adequate variance, because we had data to predict both purchases and non-purchases. Following Hu, Wu, Wu, and Zhang (2010), we checked that all the participants followed the instructions given in the computer room with respect to viewing the websites and clicking each button up to the purchase button. We excluded questionnaires filled out in less than eight minutes because, following Ray et al. (2011), we felt that the length of the questionnaire meant that this was not possible.

Table 4
Gender and age characteristics of the respondents.

	Characteristics	Frequency	%
Gender	Male	306	67.85
	Female	145	32.15
	Total	451	
Age	<20	26	5.77
	20–24	62	13.75
	25–34	143	31.71
	35–44	164	36.36
	45–54	40	8.87
	55–64	14	3.10
	≥65	2	0.44
	Total	451	100

The data was collected from November 2013 to January 2014 in a computer room under the supervision of two members of the research team and one graduate student. From the 489 participants who were recruited, a total of 451 usable questionnaires were obtained. The characteristics of the participants are very similar to those of the population (Table 3).

4. Data analysis and results

A regression analysis of latent variables is used in this study, based on the partial least squares (PLS) optimization technique, to build a model that represents the relationships between the fourteen proposed constructs measured by many items. The PLS is a multivariate technique to test structural models (Wold, 1985). It estimates the model parameters that minimize the residual variance of the dependent variables of the whole model (Hsu, Chen, & Hsieh, 2006), it does not require any parametric conditions (Chin, 1998), it is recommended for small samples (Hulland, 1999), and it is particularly used for complex models, exploratory studies and prediction (Henseler, Ringle, & Sinkovics, 2009). It is the preferred algorithm when the study aim is prediction and theory development (Ayeh, Au, & Law, 2013; Hair, Ringle, & Sarstedt, 2011). This paper tries to explore the role of third-party assurance seals and their related constructs as antecedents of trust, and the role of trust and perceived value in predicting the intention to purchase travel online. This is the reason we chose the PLS technique.

The data analysis took place through a two-stage methodology, as suggested by Gerbing and Anderson (1988), in which the first stage was to develop and evaluate the measurement model and the stage second was to develop the full structural equation model.

4.1. Measurement model evaluation

The first step involved establishing the convergent and discriminate validity of the constructs, and the individual reliability for each item.

According to Falk and Miller (1992), the convergent validity of each construct is acceptable for a loading higher than 0.505. The individual reliability for each item is given by loadings or correlations between the item and the construct. Table 5 indicates the loadings for each item and the t-values that are significant. They all comply with the required conditions.

To measure the internal coherence of the indicators in relation to the constructs, the reliability was calculated, and to verify the reliability of the indicators, Dillon–Goldstein's rho, also referred to as the composite reliability coefficient (Werts, Linn, & Jöreskog, 1974), and the Cronbach alpha coefficient (Cronbach, 1970), were utilized; these range from 0 (no similarities) to 1 (maximum similarities). Both parameters are taken into account, as the first concerns the respective indicators while the second assumes the contribution made by each indicator to be similar. Table 6 represents the values of each coefficient. The composite reliabilities are above the minimum acceptable limit of 0.70 (Gefen, Straub, & Boudreau, 2000; Nunnally, 1978). The Cronbach alpha coefficient levels are also shown in Table 6. They are all above 0.70, which is recommended for confirmatory research (Churchill, 1979).

Convergent validity indicates the common variance between the indicators and their construct. To evaluate this validity, as suggested by Fornell and Larcker's (1981), each construct's average variance extracted (AVE) was calculated; the acceptable threshold should be higher than 0.50. Table 6 represents the AVE scores achieved for each of the fourteen constructs employed, which in all cases surpass the minimum desirable value.

In order to confirm the discriminant validity among the constructs, the square root of the AVE must be superior to the

Table 5
Items loading.

Scale items	Loadings	*t*-values[a]
AS1. The third-party assurance seals on this website make me feel more comfortable.	0.892	105.95
AS2. The third-party assurance seals on this website make me feel more secure in terms of privacy.	0.928	138.43
AS3. Third-party assurance seals on this website make me feel safer in terms of the transaction.	0.934	162.09
AS4. The third party assurance seals on this website make me feel this website is secure.	0.931	181.90
BI1. The probability that I would consider to purchase a tourism product from this website is high.	0.904	105.76
BI2. If I were to purchase a tourism product, I would consider purchasing it from this website.	0.929	189.88
BI3. The likelihood of my purchasing a tourism product from this website is high.	0.944	240.67
BI4. My willingness to purchase a tourism product from this website is high.	0.941	200.51
DC1. I specifically look for third-party certification symbols.	0.627	9.85
DC2. I generally have faith in third-party certification.	0.944	140.63
DC3. I generally trust third parties.	0.944	59.89
FA1. I am familiar with this tourism product shopping website.	0.953	230.03
FA2. I am familiar with the processes of purchasing products from this tourism product shopping website.	0.959	283.39
FA3. I am familiar with searching for products at this tourism product shopping website.	0.952	256.10
IQ1. The tourism product website provides accurate information about the tourism product that I want to purchase.	0.848	73.15
IQ2. The tourism product website provides sufficient information when I try to make a transaction.	0.867	105.65
IQ3. The tourism product website provides enough depth of information about its products.	0.878	95.53
IQ4. The information provided by tourism product website is helpful to me in purchasing tourism products.	0.868	101.63
IQ5. The information in the tourism product website is clear for me to make a purchase.	0.876	121.48
IQ6. The tourism product website provides up-to-date information.	0.834	75.71
PC1. Compared with other subjects on my mind, online privacy/security is very important.	0.862	27.98
PC2. I am concerned about threats to online privacy/security today.	0.861	52.01
PC3. The greater my interest to obtain a certain service or product from the Internet, the more I tend to suppress my privacy/security concerns.	0.575	9.29
PP1. I am concerned that tourism product website collects too much personal information from me.	0.819	53.20
PP2. I am concerned that the tourism product website will use my personal information for other purposes without my authorization.	0.921	169.60
PP3. I am concerned the tourism product website will share my personal information with other entities without my authorization.	0.912	178.14
PP4. I am concerned that unauthorized persons (i.e. hackers) have access to my personal information.	0.820	54.69
PP5. I am concerned about the privacy of my personal information during a transaction.	0.815	51.52
PP6. I am concerned that the tourism product website will sell my personal information to others without my permission.	0.848	67.10
PS1. The tourism product website implements security measures to protect users.	0.813	75.78
PS2. The tourism product website usually ensures that transactional information is protected from accidentally being altered or destroyed during a transmission on the Internet.	0.787	56.80
PS3. I feel secure about the electronic payment system of the tourism product website.	0.883	133.94
PS4. I am willing to use my credit card on this website to make a purchase.	0.873	96.22
PS5. I feel safe in making transactions on this website.	0.880	101.08
PT1. This tourism product website has integrity.	0.914	147.62
PT2. This tourism product website is reliable.	0.958	352.66
PT3. This tourism product website is trustworthy.	0.937	183.46
PV1. Considering the money I pay to purchase tourism products on this website, online shopping here is a good deal.	0.859	97.05
PV2. Considering the effort I make in shopping on this website, online shopping here is worthwhile.	0.925	155.81
PV3. Considering the risk involved in shopping on this website, online shopping here is of value.	0.898	134.29
PV4. Overall, online shopping on this website delivers me good value.	0.920	188.44
REP1. This company is well known.	0.827	68.72
REP2. This company has a good reputation.	0.939	226.38
REP3. This company has a good reputation in its market.	0.921	151.83
SS1. The availability of a privacy or a security statement was easily seen on the tourism product website.	0.843	78.91
SS2. This tourism product website has a policy on privacy or security.	0.877	127.97
SS3. I am aware of the details of this tourism product website's privacy or security policy.	0.781	47.45
US1. Website assurance seals are designed to increase the privacy/security a customer has for a website.	0.717	29.83
US2. Websites must state how they collect and share data in order to be awarded a website assurance seal.	0.737	30.75
US3. Third-party organizations assess the business practices of a website before awarding a seal.	0.784	43.43
US4. You can click on the seal to verify that the website is entitled to display the seal.	0.740	30.92
US5. A website must display a data privacy and security statement in order to get a seal	0.701	26.16
WI1. A lot of time seems to have been invested in developing this website.	0.907	125.59
WI2. A lot of effort seems to have been invested in developing this website.	0.936	196.90
WI3. A lot of money seems to have been invested in developing this website.	0.898	140.04

[a] All tests were significant at p-value <0.001.

correlation between the constructs, following Fornell and Larcker (1981) guidelines. Table 7 presents the square roots of the AVE (in the diagonal) and the correlation among the constructs. Their values indicate adequate discriminant validity of the measurements.

The factor structure matrix of loadings and cross-loadings was examined to complete the study of the convergent and discriminant validity of the measurements (Table 8). Items measuring the same construct represent prominently and distinctly higher factor loadings on a single construct than on other constructs (bold

Table 6
Composite reliability, AVE and Cronbach alpha coefficient.

Construct	Composite reliability	AVE	Cronbach alpha
Assurance seal (AS)	0.957	0.849	0.941
Purchase intention (BI)	0.9621	0.864	0.947
Disposition to third-party certification (DC)	0.885	0.726	0.824
Familiarity with website (FA)	0.969	0.911	0.951
Information quality (IQ)	0.945	0.743	0.931
Internet privacy concerns (PC)	0.834	0.605	0.729
Perceived privacy (PP)	0.943	0.734	0.927
Perceived security (PS)	0.927	0.719	0.902
Trust (PT)	0.955	0.877	0.930
Perceived value (PV)	0.945	0.812	0.922
Vendor reputation (REP)	0.925	0.804	0.877
Privacy/security statement (SS)	0.873	0.697	0.784
Understanding of privacy seals (US)	0.855	0.542	0.796
Web site investment (WI)	0.938	0.835	0.901

values). This is also an indication of the convergent and discriminate validity of the measurement.

Following the establishment of the individual reliability of each item and the convergent and discriminant validity of the constructs, the structural model was examined.

4.2. Structural model

A PLS analysis was performed to test H1 through H22. The regression parameters are based on the bootstrapping of 100 samples and not on a sample estimator. This facilitates the computation of the student *t*-test for each hypothesis, and the generalization of the results (Lévy, Valenciano, & Michal, 2009). The results represented in Fig. 2 and Table 9 indicate the relationship between the different constructs. According to Falk and Miller (1992), since all the r-squares are higher than 0.10 the predictive capability of the model is satisfactory.

5. Conclusions

Online transactions represent a new stage for the tourism industry, which is working to develop better commercial practices (Kim et al., 2011). Consumers are shopping online (Kim et al., 2011), but, although the number of Internet users has increased, many users do not buy online: they are reluctant to provide personal information and/or transactional information for electronic payments online because they do not trust e-commerce (Kim et al., 2008, 2011). The lack of perceived privacy and security protection in e-commerce is the main reason why many consumers choose not to shop online; trust therefore plays a relevant role in online transactions (Kim et al., 2011; Wu & Chang, 2005). In fact, trust has been proved to be one of the most relevant variables influencing e-commerce in the field of tourism (Escobar-Rodríguez & Carvajal-Trujillo, 2014; Fam et al., 2004; Kim et al., 2009).

Regarding e-commerce in tourism, few studies have analyzed trust in online shopping (Kim et al., 2011) and its antecedents, and no study has analyzed the antecedents of perceived privacy and/or perceived security or the effect of perceived trust on perceived value. To fill this gap, we propose a model of the formation of online purchase intention based on perceived value and the antecedents of perceived privacy and security from Ray et al. (2011) and extended to third-party assurance seals and related constructs, such as disposition towards third-party certification and the understanding of seals. Our model also examines the influence of consumers' perceived information quality, privacy and security on trust. In particular, this research includes all the antecedents of perceived security and privacy, except technological innovativeness, and security and privacy signals such as privacy/security policy, perceived website investment, and vendor reputation, and personal predispositions towards them, such as Internet privacy concern and familiarity with the website. These antecedents are extended by incorporating consumers' perception of third-party assurance seals (signal), their disposition towards third-party certification, their understanding of third-party seals (predispositions), the influence on perceived trust of perceived privacy, perceived security, and information quality, and, finally, the effect of perceived trust and perceived value on the intention to purchase travel online.

5.1. Academic implications

The results of this study reveal an advance in research on tourism and technology. The main contribution of the study to the literature is the evidence it provides on the effect of assurance on trust antecedents in consumers' intention to purchase travel online. This is a topic that has not been researched by academics in the context of tourism and e-commerce in the past. This paper represents a step forward in research on how consumers' personal predispositions and security and privacy signals affect their intention to purchase travel online. Additionally, this is one of the first studies to analyze, in the context of e-commerce and tourism, the influence of third-party assurance seals and two related constructs, the disposition towards third-party certification and the understanding of privacy seals. Furthermore, this paper analyzes the factors that influence consumers' perceived trust in travel websites

Table 7
Discriminant validity of constructs.

	AS	BI	DC	FA	IQ	PC	PP	PS	PT	PV	REP	SS	US	WI
AS	**0.921**													
BI	0.421	**0.929**												
DC	0.370	0.079	**0.852**											
FA	0.232	0.322	0.344	**0.955**										
IQ	0.458	0.760	0.085	0.264	**0.862**									
PC	0.321	0.184	0.167	0.360	0.235	**0.778**								
PP	0.057	0.254	−0.041	0.027	0.231	−0.145	**0.857**							
PS	0.518	0.713	0.160	0.317	0.723	0.218	0.322	**0.848**						
PT	0.496	0.754	0.077	0.209	0.826	0.221	0.229	0.747	**0.936**					
PV	0.463	0.804	0.098	0.327	0.804	0.219	0.232	0.732	0.810	**0.901**				
REP	0.366	0.644	0.048	0.241	0.699	0.231	0.265	0.674	0.716	0.685	**0.897**			
SS	0.481	0.545	0.287	0.420	0.528	0.250	0.178	0.571	0.488	0.525	0.499	**0.835**		
US	0.437	0.308	0.460	0.394	0.331	0.382	0.056	0.395	0.309	0.325	0.251	0.401	**0.736**	
WI	0.411	0.594	0.108	0.233	0.601	0.220	0.257	0.691	0.661	0.621	0.664	0.579	0.354	**0.914**

Table 8
Factor structure matrix of loadings and cross-loadings.

	AS	BI	DC	FA	IQ	PC	PP	PS	PT	PV	REP	SS	US	WI
AS1	**0.892**	0.389	0.370	0.268	0.441	0.295	0.033	0.471	0.492	0.467	0.406	0.487	0.423	0.403
AS2	**0.928**	0.404	0.334	0.205	0.402	0.298	0.044	0.443	0.436	0.403	0.296	0.454	0.426	0.382
AS3	**0.934**	0.383	0.335	0.200	0.425	0.301	0.054	0.465	0.449	0.407	0.312	0.407	0.395	0.356
AS4	**0.931**	0.378	0.327	0.184	0.421	0.292	0.078	0.522	0.452	0.429	0.333	0.427	0.373	0.373
BI1	0.363	**0.904**	0.083	0.305	0.679	0.138	0.216	0.635	0.664	0.706	0.537	0.523	0.288	0.539
BI2	0.411	**0.929**	0.083	0.291	0.714	0.191	0.245	0.640	0.706	0.747	0.616	0.508	0.310	0.559
BI3	0.393	**0.944**	0.059	0.294	0.706	0.167	0.233	0.662	0.711	0.755	0.597	0.486	0.276	0.537
BI4	0.399	**0.941**	0.070	0.309	0.725	0.187	0.251	0.710	0.720	0.778	0.638	0.511	0.273	0.571
DC1	0.257	−0.029	**0.627**	0.223	0.002	0.203	−0.078	0.028	−0.010	0.000	0.011	0.269	0.251	0.042
DC2	0.369	0.075	**0.944**	0.328	0.085	0.163	−0.047	0.144	0.076	0.092	0.048	0.273	0.429	0.087
DC3	0.326	0.096	**0.944**	0.321	0.091	0.127	−0.018	0.177	0.085	0.108	0.047	0.246	0.448	0.122
FA1	0.221	0.313	0.337	**0.953**	0.259	0.345	0.029	0.298	0.199	0.302	0.248	0.403	0.376	0.214
FA2	0.216	0.280	0.347	**0.959**	0.222	0.318	0.012	0.282	0.171	0.285	0.196	0.389	0.373	0.207
FA3	0.226	0.327	0.303	**0.952**	0.273	0.365	0.035	0.324	0.223	0.344	0.243	0.409	0.379	0.244
IQ1	0.385	0.619	0.107	0.266	**0.848**	0.259	0.108	0.551	0.641	0.641	0.525	0.436	0.277	0.437
IQ2	0.404	0.638	0.117	0.199	**0.867**	0.218	0.176	0.600	0.684	0.667	0.604	0.491	0.287	0.528
IQ3	0.362	0.634	0.045	0.195	**0.878**	0.140	0.216	0.596	0.684	0.670	0.604	0.450	0.235	0.506
IQ4	0.427	0.638	0.040	0.171	**0.868**	0.145	0.211	0.630	0.695	0.708	0.596	0.403	0.241	0.508
IQ5	0.402	0.701	0.104	0.283	**0.876**	0.211	0.272	0.673	0.748	0.730	0.611	0.492	0.320	0.530
IQ6	0.389	0.687	0.036	0.247	**0.834**	0.238	0.200	0.670	0.796	0.729	0.660	0.452	0.339	0.582
PC1	0.287	0.172	0.156	0.311	0.244	**0.862**	−0.025	0.261	0.257	0.226	0.233	0.296	0.383	0.268
PC2	0.240	0.135	0.121	0.280	0.184	**0.861**	−0.173	0.146	0.157	0.160	0.157	0.157	0.305	0.133
PC3	0.222	0.119	0.110	0.249	0.098	**0.575**	−0.167	0.072	0.074	0.110	0.139	0.105	0.171	0.089
PP1	0.056	0.232	0.000	0.087	0.179	−0.126	**0.819**	0.243	0.186	0.195	0.209	0.114	0.064	0.169
PP2	0.105	0.283	−0.006	0.029	0.278	−0.106	**0.921**	0.341	0.249	0.249	0.280	0.189	0.102	0.288
PP3	0.081	0.236	−0.052	0.008	0.236	−0.119	**0.912**	0.322	0.240	0.238	0.251	0.148	0.047	0.264
PP4	0.024	0.179	−0.079	0.022	0.164	−0.164	**0.820**	0.238	0.158	0.161	0.203	0.136	0.017	0.163
PP5	−0.005	0.139	−0.049	0.001	0.106	−0.189	**0.815**	0.240	0.140	0.160	0.171	0.151	0.004	0.201
PP6	0.012	0.224	−0.031	−0.004	0.202	−0.047	**0.848**	0.251	0.184	0.170	0.237	0.171	0.041	0.213
PS1	0.579	0.561	0.229	0.287	0.636	0.283	0.162	**0.813**	0.633	0.600	0.557	0.543	0.447	0.561
PS2	0.437	0.518	0.177	0.230	0.540	0.215	0.161	**0.787**	0.573	0.521	0.528	0.519	0.335	0.572
PS3	0.443	0.640	0.066	0.253	0.616	0.144	0.330	**0.883**	0.664	0.654	0.585	0.436	0.266	0.601
PS4	0.338	0.643	0.110	0.298	0.601	0.115	0.351	**0.873**	0.598	0.627	0.578	0.422	0.284	0.557
PS5	0.392	0.653	0.100	0.276	0.665	0.164	0.355	**0.880**	0.690	0.689	0.607	0.498	0.339	0.631
PT1	0.475	0.671	0.100	0.185	0.738	0.261	0.156	0.650	**0.914**	0.723	0.647	0.413	0.306	0.605
PT2	0.482	0.730	0.058	0.173	0.791	0.173	0.234	0.722	**0.958**	0.770	0.677	0.463	0.286	0.642
PT3	0.438	0.715	0.061	0.228	0.790	0.192	0.248	0.725	**0.937**	0.782	0.687	0.492	0.277	0.610
PV1	0.380	0.632	0.086	0.310	0.655	0.210	0.138	0.571	0.636	**0.859**	0.569	0.402	0.282	0.460
PV2	0.412	0.749	0.044	0.307	0.736	0.184	0.237	0.660	0.736	**0.925**	0.635	0.458	0.275	0.556
PV3	0.427	0.730	0.097	0.249	0.713	0.186	0.250	0.694	0.753	**0.898**	0.617	0.515	0.288	0.634
PV4	0.446	0.774	0.124	0.314	0.785	0.212	0.201	0.701	0.782	**0.920**	0.642	0.508	0.325	0.575
REP1	0.258	0.560	0.042	0.262	0.591	0.216	0.203	0.569	0.565	0.583	**0.827**	0.446	0.271	0.616
REP2	0.346	0.591	0.061	0.210	0.655	0.193	0.272	0.627	0.674	0.639	**0.939**	0.448	0.235	0.598
REP3	0.375	0.581	0.024	0.182	0.634	0.213	0.236	0.616	0.682	0.619	**0.921**	0.450	0.173	0.576
SS1	0.366	0.446	0.234	0.280	0.422	0.148	0.215	0.466	0.392	0.427	0.394	**0.843**	0.328	0.470
SS2	0.456	0.531	0.219	0.400	0.549	0.259	0.114	0.557	0.502	0.543	0.474	**0.877**	0.410	0.535
SS3	0.376	0.371	0.280	0.377	0.320	0.219	0.116	0.386	0.302	0.314	0.373	**0.781**	0.244	0.436
US1	0.309	0.181	0.421	0.301	0.216	0.333	0.045	0.274	0.174	0.159	0.148	0.186	**0.717**	0.228
US2	0.280	0.136	0.277	0.281	0.146	0.375	−0.035	0.199	0.145	0.148	0.056	0.121	**0.737**	0.165
US3	0.348	0.188	0.404	0.326	0.223	0.313	0.014	0.257	0.186	0.200	0.141	0.289	**0.784**	0.215
US4	0.385	0.352	0.354	0.280	0.351	0.197	0.113	0.388	0.336	0.358	0.324	0.465	**0.740**	0.363
US5	0.243	0.189	0.206	0.265	0.199	0.252	0.011	0.261	0.217	0.247	0.147	0.284	**0.701**	0.253
WI1	0.400	0.552	0.119	0.233	0.567	0.236	0.204	0.618	0.625	0.591	0.597	0.550	0.312	**0.907**
WI2	0.380	0.545	0.075	0.178	0.569	0.191	0.250	0.637	0.621	0.570	0.604	0.511	0.337	**0.936**
WI3	0.346	0.530	0.104	0.229	0.513	0.179	0.249	0.637	0.567	0.541	0.618	0.527	0.320	**0.898**

once the perceived security and privacy of the website are known. Finally, this is one of the first studies to analyze the effect of consumers' perceived trust on the perceived value of online travel purchases.

Our findings indicate that the main predictors for consumers' perceived privacy, in order of relevance, are: Internet privacy concerns; vendor reputation; and website investment. Consumers' perceived privacy depends on the levels of their general concerns about Internet privacy, the provider's reputation, and the consumers' perception of the investment made in the travel website. On the other hand, there is no significant influence of third-party assurance seals, familiarity with the website, understanding of third-party seals, disposition towards third-party certification, or privacy and security policies on consumers' perceived privacy. Secondly, the empirical evidence of this study suggests that the main predictors of consumers' perceived security, in order of impact, are: vendor reputation; website investment; third-party assurance seals; understanding of third-party seals; privacy and security policy; familiarity with the website; Internet privacy concerns; and disposition to third-party certification. Thus, based on these findings, consumers' perceived security of websites for shopping for travel depends on eight variables: the provider's reputation, the consumers' perceived investment in the website, the display of third-party assurance seals on the website, the understanding of the seals, the privacy and security policies available, consumers' familiarity with the provider or prior knowledge of the provider, the levels of general concerns about Internet privacy, and the general disposition to trust the perception of third-party

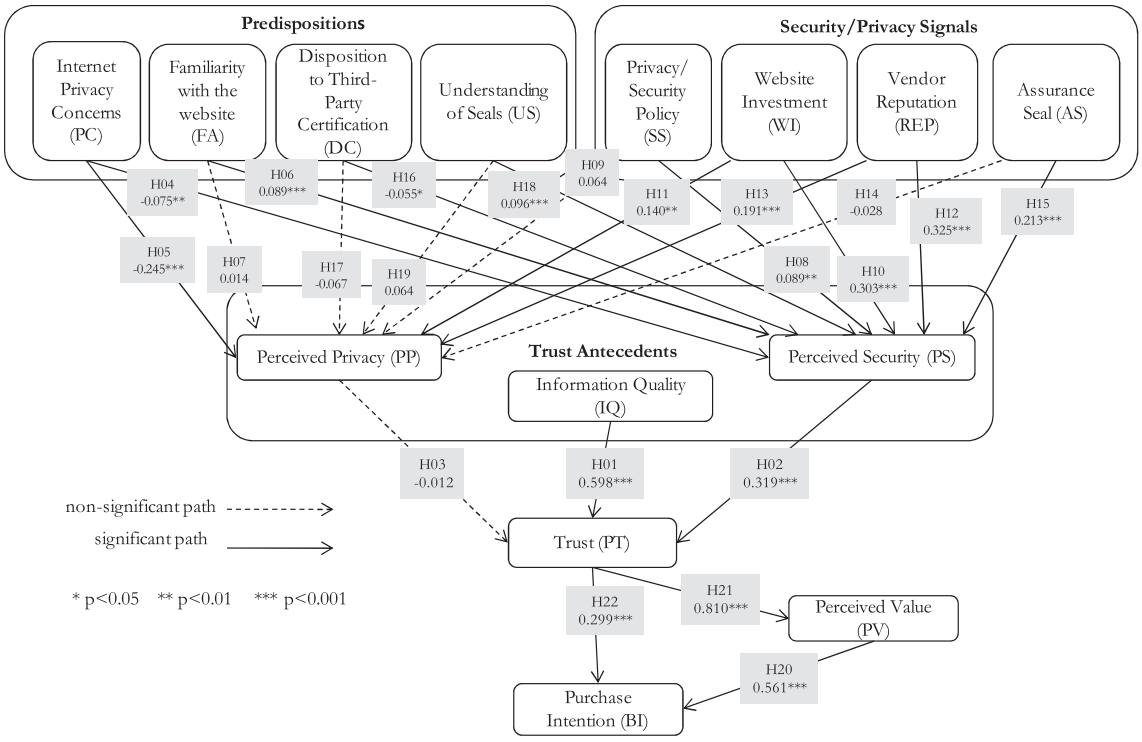

Fig. 2. Results of testing the model.

certification. Thirdly, the findings indicate that the antecedents of consumers' perceived trust, in order of impact, are information quality and perceived security. Thus, consumers' perceived trust depends on the perception of the quality of the information on the website and the security measures that they perceive on the travel website. By contrast, the hypothesis of the influence of consumers' perceived privacy on consumers' perceived trust was not proved. Fourth, the empirical evidence of this research suggests that the main drivers of the intention to purchase travel online are, in order of relevance, perceived value and trust. Lastly, consumers' perceived trust influences the perceived value of their online shopping.

Vendor reputation is the strongest predictor of consumers' perceived security in travel purchase websites. On the basis of this finding, the higher the vendor's reputation, the more likely consumers are to perceive the travel website to be secure. This finding is

Table 9
Summary of test results for the structural model.

Hypothesis	Path	Standardized path coefficient	*t*-values	Supported?	Construct	R-squared
H14	AS→PP	−0.028	0.783	No	Perceived privacy	0.139
H17	DC→PP	−0.067	1.796	No		
H07	FA→PP	0.014	0.329	No		
H05	PC→PP	−0.245	5.549	Yes ($p < 0.001$)		
H13	REP→PP	0.191	4.535	Yes ($p < 0.001$)		
H19	US→PP	0.064	1.828	No		
H11	WI→PP	0.140	3.243	Yes ($p < 0.01$)		
H09	SS→PP	0.064	1.401	No		
H15	AS→PS	0.213	7.857	Yes ($p < 0.001$)	Perceived security	0.631
H16	DC→PS	−0.055	2.219	Yes ($p < 0.05$)		
H06	FA→PS	0.089	3.498	Yes ($p < 0.001$)		
H04	PC→PS	−0.075	2.965	Yes ($p < 0.01$)		
H12	REP→PS	0.325	10.735	Yes ($p < 0.001$)		
H08	SS→PS	0.089	3.080	Yes ($p < 0.01$)		
H18	US→PS	0.096	3.380	Yes ($p < 0.001$)		
H10	WI→PS	0.303	8.543	Yes ($p < 0.001$)		
H01	IQ→PT	0.598	25.970	Yes ($p < 0.001$)	Trust	0.729
H03	PP→PT	−0.012	0.743	No		
H02	PS→PT	0.319	13.083	Yes ($p < 0.001$)		
H21	PT→PV	0.810	66.454	Yes ($p < 0.001$)	Perceived value	0.656
H22	PT→BI	0.299	9.291	Yes ($p < 0.001$)	Purchase intention	0.677
H20	PV→BI	0.561	18.571	Yes ($p < 0.001$)		

consistent with previous studies (Ray et al., 2011). In our study, vendor reputation is also a relevant predictor of consumers' perceived privacy. This means that the higher the vendor's reputation, the more likely consumers are to perceive that the website protects their privacy; hence, this also leads to the suggestion that website managers should manage their online vendor reputation carefully. This result is consistent with previous studies (Ray et al., 2011).

Website investment is a factor that plays a relevant role as a driver of perceived security and privacy protection. This is consistent with the results of Ray et al. (2011), which suggested that website investment was the strongest predictor. This means that the technical standard of a travel website, and consumers' perception that the online seller has invested effort, time, and money in it (Schlosser et al., 2006), influence both perceived security and perceived privacy. Consequently, it is recommended that online sellers invest time, effort, and money in the design of their shopping websites, so that consumers perceive that security and privacy are protected. However, in this study, website investment had a much higher effect on perceived security than it had on perceived privacy.

The results indicate that third-party assurance seals on the travel shopping websites influence consumers' perceived security. However, contrary to the relationship that we hypothesized, they do not influence consumers' perceptions of privacy protection. Thus, consumers perceive that third-party assurance seals protect their security but not their privacy. This may be because consumers do not understand what these seals mean, and believe that the seals only protect their online security. Regarding the lack of influence of assurance seals on consumers' perceptions of privacy protection, no consensus has been reached, and our results are consistent with Lowry et al. (2011), although Kim and Kim (2011) found them to have an influence. As this is the first study to analyze the effect of assurance seals on consumers' perception of security, we cannot compare our results with the previous literature. The closest research, referring to contexts other than tourism, concerned the influence of assurance seals on consumers' perceived trust, and while some studies reported a positive influence (Jiang et al., 2008; Rifon et al., 2005; Yang et al., 2006), others did not (Kim et al., 2008; McKnight et al., 2004).

Consumers' understanding of third-party assurance seals is a variable that plays a relevant role as a direct driver of their perceived security on online shopping websites. This means that the greater the understanding of assurance seals, the greater consumers' perceived security protection when shopping on those websites. As this is the first piece of research to study the influence of an understanding of assurance seals on consumers' perceived security, we cannot compare our results with the previous literature. We suggest that web managers should ensure consumers' understanding of seals, because that implies a broader perception of security protection in the online shopping processes. On the other hand, the understanding of seals is found not to influence consumers' perceived privacy protection. This result coincides with those of Lowry et al. (2011).

Regarding the influence of privacy and security policies displayed on travel websites, this factor is a predictor of consumers' perceived security on those websites. This means that when this signal, a privacy and security policy, is displayed, consumers perceive that the travel website protects their security. However, privacy and security policies displayed on websites for travel shopping are not a predictor of consumers' perceived privacy. Thus, that signal does not affect consumers' perceived privacy protection. This result partially coincides with that of Ray et al. (2011), who confirmed the effect of a privacy and security policy on both consumers' perceived privacy and consumers' perceived security.

The website familiarity factor affects consumers' perceived security in online shopping for travel. However, it does not influence consumers' perceived privacy. This means that consumers' prior knowledge of the online seller of travel increases their perceived security protection but does not influence their perceived privacy protection. These findings partially coincide with those of Ray et al. (2011), who could not confirm the direct influence of website familiarity on consumers' perceived privacy and security.

The Internet privacy concerns factor influences consumers' perceived security and privacy in online shopping for travel. This means that consumers' predisposition to believe that there are risks related to personal information and payments decreases their perceived privacy protection in online shopping for travel products and decreases their perceived security protection in online shopping. These results are not consistent with the results of Ray et al. (2011), who could not confirm the direct effect of Internet privacy concerns on consumers' perceived privacy and security.

With respect to the disposition towards third-party certification factor, this, in contrast to our expectations, does not exert a positive influence on perceived security protection, and, of even greater importance, appears to have a negative effect. This surprising finding may reflect the fact that consumers with higher levels of disposition to trust in third-party certification might already perceive a lack of security in travel websites. On the other hand, consumers with lower levels of disposition to trust in third-party certification tend to perceive higher initial security in a travel website because they think that travel websites implement security measures to protect them. Finally, the disposition towards third-party certification has a smaller impact on the perceived security protection than the influence of the other determinant factors that we consider.

In our research, contrary to the relationship hypothesized, the disposition to trust in third-party certification does not affect consumers' perceived privacy protection. An explanation for the lack of an effect of the disposition to trust in third-party certification on privacy in online shopping for travel is that other, more relevant, antecedent factors of the perception of privacy, such as vendor reputation, website investment and Internet privacy concerns, have displaced much of the effect of the disposition towards third-party certification on perceived privacy. Thus, we believe that in the presence of stronger cues, disposition towards third-party certification becomes less relevant in influencing consumers' perceived privacy. This is the first paper to study the influence of the disposition towards third-party certification on consumers' perceived security and privacy, and we cannot compare our results with any previous studies. In fields other than tourism, the closest study cannot demonstrate the direct effect of consumers' disposition to trust on their perceived trust (Wu et al., 2010).

In this research, the results suggest that the main antecedents of trust that are related to consumers' perceptions are, in order of relevance, information quality and perceived security. Thus, consumers' perceived trust depends on the perceived quality of the information on the travel websites and their perceived security. This means that the greater the consumers' perception of the quality of information offered and their perceived security on the travel website, the greater will be the perceived trust in that website. However, we were surprised to find that consumers' perceived privacy is not a predictor of perceived trust: the relationship hypothesized is not significant. Thus, consumers' perceived privacy protection in e-commerce and tourism does not imply greater perceived trust in the travel website. Thus, consumers have perceived trust in travel websites because of the perceived information quality and the perceived security, but not because of their perceived privacy on the websites. The information quality is the strongest predictor of consumer trust. This coincides with the results of previous studies (Escobar-Rodríguez & Carvajal-Trujillo, 2014; Kim et al., 2008; Liao, Palvia, & Lin, 2006; McKnight

et al., 1998). Consumers' perceived security is also a predictor of consumer trust, and this is consistent with the results of previous studies (Escobar-Rodríguez & Carvajal-Trujillo, 2014; Kim et al., 2008, 2011; Yousafzai et al., 2005).

Based on the results of this research, the predictors of online purchase intention in the context of e-commerce and travel, in order of relevance, are perceived value and trust. Perceived value is the main antecedent of online purchase intention, and this means that the greater the perceived value to consumers of items on the travel website, the more likely they are to have the intention to shop on that website. Kim et al. (2012) also found that perceived value is an antecedent of online purchase intention, although not that it is the principal antecedent. Trust is a predictor of the online purchase intention for e-commerce and travel. This means that the greater consumers' perceived trust in travel websites, the stronger their intention to use them. This result is consistent with those of previous studies (Kim et al., 2009, 2011; Sanz-Blas et al., 2014; Wen, 2010). In this research, also, trust is found to be an antecedent of perceived value. Thus, the greater consumers' perceived trust, the greater the perceived value that consumers may obtain by shopping on the travel website.

In this study, the model proposed by Ray et al. (2011) has been extended to explain consumers' perceived privacy and security, trust, perceived value, and purchase intention in relation to e-commerce and travel. This paper extends the model of Ray et al. (2011) by adding third-party assurance seals and two related constructs, the disposition towards third-party certification and the understanding of third-party seals.

5.2. Managerial implications

The results of this research have relevant practical implications for marketing practitioners and managers who design strategic plans and implement tools to improve the performance of online travel shopping. On the one hand, the knowledge of the antecedents of perceived security and the influence of these factors on trust is useful for managers who should develop strategies and actions aimed at increasing the perceived security protection of their websites and, consequently, the trust in these websites. On the other hand, as information quality influences trust, actions can be taken by managers to increase information quality. On the basis of the results of this research, perceived value is the main antecedent of online purchase intention for travel products, and so it is recommended that the managers of travel websites direct their marketing strategies towards creating and maintaining consumers' maximal perceived value in the online transactions. This is the single largest action that managers can take to ensure that more consumers have a stronger online purchase intention. The results of this study also suggest that tourism marketers can influence the perceived value of online shopping, and hence the online travel purchase intention, if they are able to increase consumers' perceived trust in their websites.

Since many consumers are still reluctant to buy travel products online because of their distrust of travel websites, tourism managers should be aware of the importance of improving the level of consumers' trust. We found that information quality is the main predictor of trust, and thus, to improve the level of perceived trust, tourism managers should increase the quality of the information provided on their websites. For this reason, travel websites should provide up-to-date and accurate information regarding both travel products (e.g., timetables, availability, prices, conditions, etc.) and the online transaction process. The decision-making process for consumers requires them to scan, collect, filter, integrate, and compare information about travel products, but this process is time-consuming and important (Liao et al., 2006). If a travel e-commerce website cannot offer complete and accurate information, consumers may perceive that it is not suitable for completing a travel purchase online. Thus the information provided on the website should be accurate, clear, timely, and sufficient in terms of depth of content, should describe the characteristics of the travel product and should be free of technical terms. For example, to increase consumers' perception about the timeliness and accuracy of information, the travel website can include a time stamp for the information (Kuan, Bock, & Vathanophas, 2008).

Our results indicate that to improve the level of perceived trust, tourism managers should try to improve the level of consumers' perceived security on their websites. The findings suggest that vendor reputation is the strongest predictor of consumers' perceived security for travel shopping websites. It is recommended that web managers of online shopping sites take care to manage their online vendor reputation to ensure that it is high, because it is a quality signal that is very relevant for increasing consumers' perceived security. We suggest that tourism managers should manage the word-of-mouth communication in social networks and recommendation websites to maintain and increase their reputation. Given that website investment is another relevant antecedent of perceived security in online transactions for travel products, it is fundamental that tourism managers invest time, effort, and money in the design of their online shopping websites so that consumers perceive that their security is protected. Online sellers should pay attention to the design and build of the travel website, since website investment influences consumers' perceived security. Another relevant implication for tourism managers is related to the role of third-party assurance seals. From our findings, the consumer perceives that an online seller provides security in online transactions for travel products if a third-party assurance seal is displayed on the travel website. It is recommended that travel websites should display third-party assurance seals because this increases consumers' perceived security. Communications by assurance seal companies can enhance consumer beliefs in these seals. It is relevant to indicate that there is a need to inform consumers about the functions of third-party assurance seals, because if the consumers do not understand them they are useless. To facilitate the understanding of the seals, tourism managers should encourage consumers, by text instructions or visual cues, to click on the third-party assurance seal and find an explanation of the seal (Kimery & McCord, 2002b). We agree with Kimery and McCord (2002b) that these explanations by assurance seal companies should be well-written and simple, to make them easier to understand. We found in this study that the privacy and security policies displayed on travel websites are a predictor of consumers' perceived security in online transactions on these websites. An implication for tourism managers is that travel websites should display and clearly explain these privacy and security policies, which are signals for increasing consumers' perceived security. We also recommend, if privacy and security policies are to be useful, that they do not contain descriptions that are too lengthy, because consumers do not wish to spend time and effort reading them (Kim & Kim, 2011), and that they do not incorporate technical words that are hard for consumers to understand (Kim & Kim, 2011). It is possible that the provision of privacy and security policies in video format can increase consumers' perception of security protection (Lee, Au, & Law, 2013). Given that consumers' perceived security is influenced by their familiarity with the travel website, it is fundamental for tourism managers to ensure that consumers have knowledge of the online seller, and have an understanding of how to search for information and how to carry out an online transaction through the travel website. This knowledge arises from consumers' prior experience of the process of purchasing from travel websites. It is recommended that travel companies implement communication

strategies on the Internet and/or other traditional media so that consumers can increase their knowledge and understanding about using travel websites for shopping online. This would have the effect that more consumers would perceive a stronger security protection in online transactions for travel products. Additionally, an easy purchasing process for travel websites should make it a good experience and, consequently, cause consumers to become familiar with the travel website.

The influence of the personality characteristics of consumers in Spain on their perceived security, such as their propensity to be concerned about threats to personal information and/or safety in payments for online transactions, and the degree to which they are predisposed to depend on third parties for trustworthy information during online transactions (Jiang et al., 2008), offer practical implications for tourism managers. It is suggested that, in Spain, travel websites should deliver specific actions for each segment of consumers, according to the degree of their concerns about privacy and their disposition towards third-party certificates. It is recommended that websites are designed to capture distinctions in consumers' concerns about privacy and disposition to trust, and then dynamically adapt their information according to the consumer segment. Also, for consumers who show high Internet privacy concerns, tourism managers should inform consumers and ensure that they can easily check the type of information available and know that they can delete or modify that information (Malhotra et al., 2004).

5.3. Future research

Finally, we propose some ideas for future work in relation to the formation of perceived security and privacy, trust, perceived value, and online purchase intention. It would be interesting to replicate this research for different specific travel products, to reach more insightful conclusions. This study is cross-sectional, that is, it measures the variables at a single point in time; future studies should therefore examine the validity of the proposed model by a longitudinal analysis. It would also be of interest to replicate this research in different countries and to examine the possible cross-cultural differences. Another future research line is to include other variables, such as user experience with the Internet, user experience of purchasing tourism products, consumer personality traits, the influence of price on perceived value, and socio-demographic characteristics.

Appendix A. Supplementary data

Supplementary data related to this article can be found at http://dx.doi.org/10.1016/j.tourman.2014.10.009.

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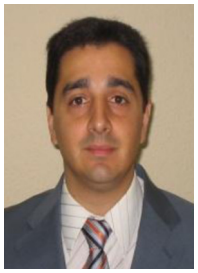
Enrique Bonsón Ponte is a professor of Financial Economics and Accounting at the University of Huelva (Spain). Currently he is the president of the New Technologies Commission of the Spanish Accounting and Business Administration (AECA) and vice president of the Association XBRL Spain. His research, mainly in the field of information technologies and business administration, has been published in leading academic journals including Government Information Quarterly, International Journal of Accounting Information Systems, International Journal of Digital Accounting Research, Journal of Emerging Technologies in Accounting and Online Information Review.

Elena Carvajal-Trujillo is an assistant professor of Marketing in the Faculty of Business Science Management, University of Huelva (Spain). She received her Ph.D. in Business Administration from University of Seville in Spain. Her research interests include consumer behavior and tourism and Internet marketing. Her research has appeared in journal as International Journal of Hospitality Management and Tourism Management.



Tomás Escobar-Rodríguez, PhD, is an Associate Professor of Accounting and Information Systems at the University of Huelva (Spain). His research focuses on information technology and business administration. He has published in leading academic journals including the Enterprise Information Systems, International Journal of Hospitality Management, Tourism Management, International Journal of Accounting Information Systems, Online Information Review and Journal of Information Systems.