Article

Self-Consciousness in Online Shopping Behavior

Luis Miguel López-Bonilla *, Borja Sanz-Altamira and Jesús Manuel López-Bonilla *

Department of Business Administration and Marketing, University of Seville, 41018 Seville, Spain; borja@us.es
* Correspondence: luismi@us.es (L.M.L.-B.); lopezbon@us.es (J.M.L.-B.)

Abstract: Self-consciousness can be considered as the internal disposition to direct attention to oneself. This dispositional tendency can be focused on private aspects of the self, but also on public characteristics of the individual. We examine self-consciousness in online consumer behavior. This concept has been poorly investigated in consumer research. The main objective of this paper is to analyze the influence of the dimensions of self-consciousness in consumer adoption of online shopping. This study is based on a sample of 725 Spanish undergraduates. Findings indicated that public self-consciousness is a significant predictor of the adoption of online shopping, and inversely affects perceived ease of use and usefulness. These results may have important implications in the segmentation of users of self-service technologies.

Keywords: self-consciousness; e-commerce; consumer behavior; Technology Acceptance Model

1. Introduction

The internet has been a relevant distribution channel and promotion tool for organizations for several years. However, as Arce-Urriza and Cebollada-Calvo [1] indicate, although online shopping sales are still low compared to offline sales, their growth rates are much higher, which suggests that the proportion of online sales will be even higher in the future. This paper focuses on the study of self-consciousness and its influence on the adoption of online shopping.

The self-consciousness of the person discusses the predisposition or willingness to direct one's attention inside or outside of oneself. Fierro [2] points out that this concept is one of the integral phenomena of the "self" system. As Jiménez [3] explains, the philosophical, anthropological and psychological fields show the importance of this self-ownership, that is, reflexivity: the ability to use oneself as an object of attention. There is a dichotomy regarding objects of conscious attention, so that the attention of the person considered, at any time, is absolutely directed to give importance to an internal point of view of oneself, or to external events of the subject, without the possibility of attention being focused on both aspects at the same time.

Duval and Wicklund [4] proposed the objective self-awareness theory, and this originated the scientific research on self-consciousness which investigates the differential effects of focusing attention on oneself, but only reacting to a temporary state of self-awareness, without considering the individual differences. This omission provoked the necessary impulse for the development of a widely used measurement instrument, the Fenigstein, Scheier, and Buss [5] Self-consciousness Scales. Using this scale of measurement and the formulation of the model of Carver and Scheier [6], self-consciousness is considered a transient state induced by concrete stimuli, but also a feature that denotes the tendency of people to be self-focused. This scale allows individual differences to be established in accordance with the degree of self-consciousness.

The Fenigstein et al. [5] Self-Consciousness Scale identifies three aspects to assess individual differences in self-consciousness: Private Self-Consciousness, Public Self-Consciousness, and Social Anxiety. The first two factors measure psychological tendencies centered on oneself. Private self-consciousness is related to the tendency to be introspective about one's

thoughts and feelings. Meanwhile, public self-consciousness refers to attending to oneself as a social object, being concerned with how others view the self, and the impression that one makes on others. Social anxiety refers to discomfort in situations that involve being in the same place with other people.

The construct of self-consciousness has been poorly studied in consumer behavior literature. The present work aims to expand this knowledge by analyzing the effects caused by the dimensions of self-consciousness on the process of consumer adoption of online shopping. Understanding the antecedents of online shopping behavior is essential in order to develop and improve the use of Information and communications technologies (ICT).

The electronic ticket has been chosen as a product to be adopted through online purchasing. The use of electronic tickets has been widely spread among passenger transport companies in the last decade, but we must bear in mind that it is a type of sale that the consumer can adopt in its entirety or only partially; that is, it is an alternative system to the traditional method of buying tickets. Therefore, as López-Bonilla and López-Bonilla [7] indicate, consumers can buy an electronic ticket autonomously through digital means, offered by transport service providers or intermediary agents, without having to interact with the employees of any of these organizations. However, the purchase of the electronic ticket can be made through the staff of the transport company or the intermediary company.

The structure of the study continues with a review of the literature on self-consciousness within the framework of consumer behavior. The objectives and hypotheses of the study are presented below, proposing a research model based on the acceptance of ICT. Next, the study methodology is described, as well as the results obtained from the empirical analysis and the final considerations follow.

2. Literature Review

Many studies deal with the relationship of self-consciousness and personality of the individual, particularly the extensive review conducted by Scandell and Scandell [8]. But Jimenez [3] warns that all these investigations have given little attention to the healthy personality variables, and consequently he dedicates a study to it, proving that the profile of individuals who tend to concentrate their attention on the private aspects of themselves, with less experience of personal wellbeing and social adaptation, have a poor assessment of themselves. Moreover, people who focus their attention on the public aspects of themselves are less up-to-date and tend to behave more in accordance with situational behavioral clues than with personal ones.

Abe, Bagozzi and Sadarangani [9] warn that self-consciousness has been little studied in the field of consumer behavior. This is verified in the present review of the literature, although there is a certain favorable trend toward greater applicability of self-consciousness in the consumer field in the last decade. In this sense, most of the previous works have focused on public self-consciousness [10–13]. In contrast, there are two studies that have analyzed the private self-consciousness dimension exclusively [13–15]. Finally, few studies have examined the three dimensions or even two of them [9,16–18].

Table 1 contains a summary of the published works that have dealt with self-consciousness in the field of consumer behavior. This table details in chronological order the authors of the studies carried out, specifying the sample used and the content analyzed in relation to self-consciousness: PUSC is public self-consciousness, PRSC is private self-consciousness, and SA is social anxiety.

Table 1. Self-consciousness research on consumer behavior.

Authors	Content	Sample
Burnkrant and Page (1982)	PUSC	Unspecified
Solomon and Schopler (1982)	PUSC	104 US individuals
Gould and Barak (1989)	PUSC	679 US individuals
Gould (1993)	PRSC	337 US individuals
Bushman (1993)	PUSC	160 university students and 160 non-university students
Abe et al. (1996)	PUSC, PRSC, SA	402 Japanese university students and 233 US university students
Marquis (1998)	PUSC, PRSC	250 Canadian individuals
Marquis and Filiatrault (2000)	PUSC	159 Canadian university students
Marquis and Filiatrault (2002)	PUSC, PRSC	159 Canadian university students
Dabholkar and Bagozzi (2002)	PUSC, SA	392 US university students
Marquis and Filiatrault (2003)	PUSC	159 Canadian university students
Xu, Summers and Belleau (2004)	PUSC	690 US female respondents
Xu (2008)	PUSC	96 US university students
Sun, Horn and Merrit (2009)	PUSC	21,974 individuals from 25 countries
Workman and Lee (2011)	PUSC	400 US university students
Workman and Lee (2013)	PRSC	400 US university students
Tolbert, Kohli and Suri (2014)	PUSC, PRSC	198 US consumers
López-Bonilla and López-Bonilla (2015)	PUSC, PRSC, SA	819 Spanish university students
Lennon, Kim, Lee and Johnson (2017)	PUSC	411 US students
Shah and Amjad (2017)	PUSC, PRSC, SA	388 Pakistan consumers

Source: own elaboration.

Table 1 suggests that most papers have only focused on public self-consciousness. Therefore, in a study on image management, Burnkrant and Page [10] noted that high public self-consciousness subjects are more sensitive to social situations and are more inclined to act on those situations. They recommend using public self-consciousness as a segmentation variable for socially consumed products, and also as a means of identifying subjects who choose products for their ability to cause an external impression. In this sense, Solomon and Schopler [19] found that women high in public self-consciousness are more fashion-aware. Likewise, Gould and Barak [14] related public self-consciousness with various psychological and demographic variables of consumer behavior, observing their influence on different aspects of the consumer's daily behavior, such as the purchase of products that are socially consumed and interest in fashion. Bushman [11] revealed that high public self-consciousness subjects prefer branded to unbranded products in order to improve their public image. Workman and Lee [20] compared consumer vanity and public self-consciousness among fashion change agents and fashion followers.

In a study on the use of information technological self-services, Dabholkar and Bagozzi [12] conclude that high public self-consciousness strengthens the relationships between reliability and fun with attitudes, as well as between attitudes and intentions in the proposed model.

Likewise, some authors have related public self-consciousness with responsible consumption, such as Sun et al. [13], who noted that public self-consciousness moderates the relationship between social factors and the intention to follow a healthy diet. Other authors have related public self-consciousness with some negative aspects of consumers, such as Xu [21], who proved the influence of public self-consciousness on compulsive buying through materialism, finding that young consumers high in public self-consciousness are more likely to be materialistic. In contrast, Xu, Summers and Belleau [22] analyzed the relationship between public self-consciousness and the desire to buy controversial products, such as those made with alligator skin, thinking that these products can help them improve their look, but they found that this factor does not have a significant influence. Recently, Lennon, Kim, Lee and Johnson [23] examined the effects of public self-consciousness on buying behavior on Black Friday, noting that it moderates the relationship between anxiety and bad behavior on Black Friday in the case of women.

On the contrary, there are just two papers that analyzed private self-consciousness as the only dimension exclusively. Gould [24] studied the combined effect of private self-consciousness and self-monitoring on the consumer's self-concept, finding that high private self-consciousness subjects and low self-monitors show greater discrepancies between their real self-concept and their ideal self-concept. Workman and Lee [15] related private self-consciousness to these dimensions of consumer vanity: appearance view, appearance concern, achievement view, and achievement concern.

On the other hand, few studies examine the three dimensions or even two of them. Abe et al. [9] analyzed self-consciousness in the transcultural context, comparing Americans living in a relatively independent culture with Japanese people living in an interdependent culture. They concluded that Americans experience greater levels of private self-consciousness than Japanese people but lower levels of social anxiety, and both show similar levels of public self-consciousness.

In addition, two authors especially study public self-consciousness, but also private self-consciousness. Marquis [25], and Marquis and Filiatrault [16–18] analyze consumer reactions in situations where there is an additional delay in entering a movie theater. Marquis [25] found that people high in private self-consciousness consider the antecedents and the consequences of the waiting situation in a more cautious and reflective way. Marquis and Filiatrault [16,17] noted that high public self-consciousness subjects show a more negative evaluation of the experience of delay and have a more negative perception of service, and this significantly results in a negative word-of-mouth communication to express their dissatisfaction. Likewise, Marquis and Filiatrault [18] observe that people high in public self-consciousness tend to focus their attention on the time of delay; that is, they are quickly oriented toward the environment that surrounds them, blaming the company, and evaluating the service negatively.

Finally, some more recent studies can be cited. Tolbert and Kohli and Suli [26] examined public and private self-consciousness in the context of customer loyalty. These authors predict that the relative price of an offer in an exclusive trade moderates the effects of public and private self-consciousness on the perceptions of value. López-Bonilla and López-Bonilla [27] studied the adoption of the electronic ticket from a self-service perspective through self-consciousness profiles obtained from three dimensions. They found that a consumer who is high in private self-consciousness but low or neutral in public self-consciousness and social anxiety is the consumer profile that best explains the adoption of the electronic ticket. Shah and Amjad [28] analyzed self-consciousness with its three dimensions and found that self-consciousness moderates the relationship between moral intensity and neutralization techniques in the context of ethical consumer decisions.

3. Approach and Objectives

The purpose of this paper is to examine the influence of the dimensions of self-consciousness in consumer adoption of online shopping. As Farias, Kovacs and Silva [29] pointed out, the internet has modified the behavior of individuals, especially on the topic of online shopping behavior. There are many studies conducted on the behavior of individuals and the use of the internet. However, this broad field of study on the use of the internet has caused some controversy. On the one hand, the internet is considered as a means that causes isolation, and on the other hand, the network is a medium that offers opportunities to experience disinhibition and social competence [30]. In particular, the internet has been described as one of the most impersonal and socially distant forms of communication media [31] because people spend a lot of time online, limiting the possibilities of acquiring and maintaining the necessary skills to interact socially [32].

In contrast to the above arguments, the internet is a social communication medium that complements and spreads traditional face-to-face behaviors [33]. This is what has been called the social network theory, which has been supported by many studies that suggest that communication over the internet has enough potential to foster satisfying, long-lasting and healthy relationships [34–36].

As Suler [37] suggests, internet users say and do things that they would not normally say or do in a face-to-face interaction. They feel looser and less self-conscious, and they express themselves more openly. This phenomenon has been called the online disinhibition effect, and it has been related to personality variables. In some cases, it results in a slight deviation of the individual's behavior, while in others it can cause relevant changes.

Morahan-Martin and Schumacher [38] published a paper related to the present study. In it, they propose that anonymity and the lack of face-to-face communication on the internet can reduce public and private self-consciousness, as well as social anxiety, while facilitating prosocial behavior at the same time. These authors find differences between solitary and non-solitary people regarding the use of the internet. Thus, they confirm that the social behavior of solitary people on the internet is related to the effect of disinhibition. These authors suggest that the internet provides an ideal social environment for lonely people, since it allows them to interact with others more easily. The internet not only offers a wide social network, but also provides diverse models of social interaction that can be particularly attractive for solitary people. Anonymity and lack of physical presence allow internet users greater control over social interaction. Therefore, the internet facilitates disinhibition and provides a space to practice and develop social skills.

According to these approaches, the internet influences the personal characteristics of the individual's self-consciousness, and these characteristics of the subject affect the adoption of online purchasing. Consequently, this work suggests that individuals who are more inclined to adopt online shopping may be conditioned by their self-consciousness. Therefore, we can assume that those individuals high in social disinhibition through the internet have a greater predisposition to adopt online shopping.

There are several models to measure the adoption of technology, among which the Technology Acceptance Model (TAM) stands out as it is highly effective in predicting the use of any technology [39]. This model has been widely applied in practice [40,41] and it explains the reasons for the users' technology adoption [42]. Although the TAM was initially designed to be applied to organizations, it has been used by many researchers to explain the adoption of various technological advances, such as the internet and electronic commerce [43]. The TAM is simple [44], but it has become a robust, powerful and parsimonious model for predicting user adoption of technology [45]. Davis, Bagozzi, and Warshaw [46] note that the TAM model is a specific adaptation of the Theory of Reasoned Action by Fishbein and Ajzen [47] to model user adoption of information systems. These authors state that the objective of the TAM is to provide an explanation of the determinants of information systems acceptance, which can explain the behavior of users over a wide range of computer technologies and user groups.

In the TAM, the attitude toward the use of an information system is founded on two main determinants: perceived usefulness and perceived ease of use. Furthermore, the TAM postulates that these two variables relative to a particular technology shapes the attitude toward its use and behavioral intention to make use of that technology. Perceived usefulness refers to the degree to which people believe that using a particular system would enhance their performance [46]. The second determinant, perceived ease of use, is defined as the extent to which a person believes that using a particular system would be free of effort [48]. Hence, as Izquierdo, Martínez and Jiménez [49] point out, the TAM assumes that online purchases that the consumer considers easy to use are very likely to lead to an increase in perceived usefulness and, in addition, the consumer seeks value from this online shopping process that other alternative channels cannot provide. Customers seek products' features, price and functionality online [50].

Davis, Bagozzi and Warshaw [46] and Venkatesh and Davis [45] exclude the construct attitudes in their later model. However, some controversies have been generated about including or excluding attitudes in the TAM [51–55]. In this sense, López-Bonilla and López-Bonilla [53,54] assure that attitude is a necessary construct in the TAM, especially in voluntary scenarios, in which users have greater autonomy.

As shown in Figure 1, external variables directly affect these two constructs: perceived usefulness and perceived ease of use. These variables can be linked to the characteristics of the technological system to be used and/or to the individual differences to use it. Therefore, this research considers the three dimensions of self-consciousness as external variables. From this theoretical perspective, our work aims to achieve three objectives. First, as a general and theoretical objective, we try to contribute to the broadening of knowledge of self-consciousness in the field of consumer behavior. Secondly, we intend to know how the dimensions of self-consciousness influence the adoption of online shopping. And thirdly, we analyze the effect of online disinhibition through self-consciousness in this environment of consumer adoption of online shopping. In this sense, it would be expected that individuals characterized by greater private self-consciousness and/or lower public self-consciousness and/or greater social anxiety will be more likely to adopt online shopping, given that these personal characteristics are more related to the disinhibition effect online.
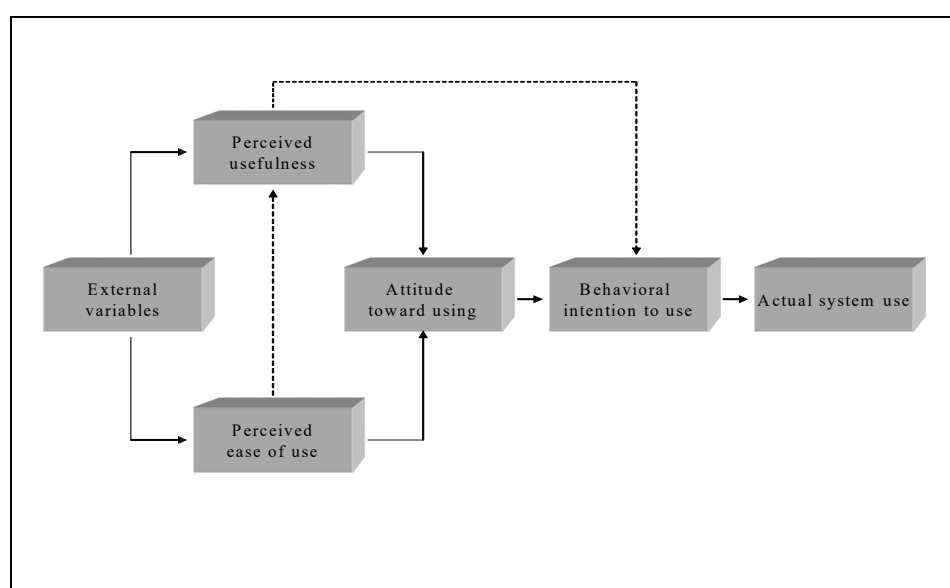

Figure 1. Technology Acceptance Model (TAM). Source: [48].

From the above theoretical approaches, the following hypotheses are tested:

Hypothesis 1 (H1). *Public self-consciousness influences the perceived ease of use.*

Hypothesis 2 (H2). *Public self-consciousness influences the perceived usefulness.*

Hypothesis 3 (H3). *Private self-consciousness influences the perceived ease of use.*

Hypothesis 4 (H4). *Private self-consciousness influences the perceived usefulness.*

Hypothesis 5 (H5). *Social anxiety influences the perceived ease of use.*

Hypothesis 6 (H6). *Social anxiety influences the perceived usefulness.*

Hypothesis 7 (H7). *Perceived usefulness influences the perceived ease of use.*

Hypothesis 8 (H8). *Perceived ease of use influences the attitude toward using technology.*

Hypothesis 9 (H9). *Perceived usefulness influences the attitude toward using technology.*

Hypothesis 10 (H10). *Perceived usefulness influences the intention to use technology.*

Hypothesis 11 (H11). *Attitude toward using technology influences the intention to use technology.*

4. Materials and Methods

The present study is based on a sample for convenience. The data were collected using a personal survey completed by 724 Spanish university students. Online shopping is very common among young students. This sample consists of 459 women and 265 men, all of whom buy products online.

A structured questionnaire was administered in the Faculty of Economics and Business Administration and in the Faculty of Tourism and Finance of the University of Seville. A self-administered survey was conducted. The survey was carried out at the beginning of the classes after having requested the collaboration of the professors. When distributing the questionnaire, explicit instructions were given to complete it. We use the PLS (Partial Least Squares) method to examine the relationships of the theoretical model to be tested. PLS is a Variance-Based Structural Equation Model technique that has become very popular in management and social sciences [56,57]. As indicated by Joreskog and Wold [58], PLS is primarily intended for causal–predictive analysis in situations of high complexity but low theoretical information.

The variables of the proposed model are based on the TAM and on the measurement scales shown below (see Appendix A). The perceived usefulness and perceived ease of use are based on the measures employed by Davis [48], Davis et al. [46] and Dabholkar [59–61], using two scales with four items each in our work. The variable attitude toward online shopping is based especially on Fishbein and Ajzen [47], and Ajzen and Fishbein's [62] studies, using a scale with four items. On the other hand, the measure of online purchase intention is gathered from Ajzen and Fishbein [62], and Dabholkar [59] studies, using a three-item scale. All these measures are semantic differential scales with seven response options. The semantic differential has been frequently used in research concerning attitudes in social psychology and related fields, such as marketing [63].

Regarding the external variables of the model, the three dimensions of self-consciousness (private and public self-consciousness and social anxiety) are integrated independently. For this purpose, we use a self-consciousness scale, an updated version by Scheier and Carver [64] based on 22 items regarding the three dimensions: nine items concerning private self-consciousness, seven regarding public self-consciousness, and six concerning social anxiety.

5. Results

We study the measurement scales of the constructs included in the model to carry out the statistical analysis of the data. Therefore, in order to check the convergent validity and the discriminant validity, we analyze the relationships between the variables and their items. As Hair, Anderson, Tatham, and Black [65] claim, it is necessary to fulfill these criteria in order to accept the model. Three metric tests are applied to check the convergent validity: reliability of the indicators, composite reliability and average variance extracted (AVE) from the latent variables.

Regarding the reliability of the indicators, all their values with respect to the variables that represent the original model of the TAM are higher than the recommended values. However, the same does not occur with the three dimensions of self-consciousness. Therefore, the results obtained recommended to remove several items of each dimension, finally leaving three indicators of private self-consciousness, two indicators of public self-consciousness, and three indicators of social anxiety.

The composite reliability and the average variance extracted (AVE) are the other two measures of convergent validity. They are detailed in Table 2 with the refined indicators of self-consciousness. Following the recommendations of Fornell and Larcker [66], with regards to the first measure, it is observed that the values exceed the recommended

minimum of 0.7 for all variables of the model. Likewise, the values of the average variance extracted (AVE) exceed 0.5, which is the recommended value. These results prove the convergent validity of the measurement model.

Table 2. Compound reliability and variance extracted from latent variables.

Variable	AVE	Compound Reliability
ATT	0.5138	0.7602
PEU	0.7181	0.8355
PU	0.5411	0.7792
ITU	0.773	0.9316
PRSC	0.7354	0.9174
PUSC	0.8285	0.9354
SA	0.8008	0.9414

Note. ATT = Attitude; PEU = Perceived ease of use; PU = Perceived usefulness; ITU = Intention to use; PRSC = Private self-consciousness; PUSC = Public self-consciousness; SA = Social anxiety.

The discriminant validity completes the analysis of the measurement model. As Chin [67] indicates, discriminant validity consists of verifying that variables relate more strongly to their own factor than to another factor. Table 3 shows these data, thereby testing the discriminant validity of the measurement scales used.

Table 3. Discriminant validity of latent variables.

Variable	ATT	PEU	PU	ITU	PRSC	PUSC	SA
ATT	0.96519						
PEU	0.4165	0.95781					
PU	0.5175	0.5013	0.97025				
ITU	0.5206	0.4183	0.5684	0.96716			
PRSC	−0.0578	−0.0958	−0.0833	−0.0538	0.87189		
PUSC	−0.1228	−0.1423	−0.1613	−0.1137	0.3436	0.91401	
SA	−0.0721	−0.1085	−0.1034	−0.0379	0.2277	0.2919	0.88272

Note. ATT = Attitude; PEU = Perceived ease of use; PU = Perceived usefulness; ITU = Intention to use; PRSC = Private self-consciousness; PUSC = Public self-consciousness; SA = Social anxiety.

Once the measurement scales used have been analyzed, the structural analysis of the model concludes with the empirical study. Figure 2 details these results. It is observed that all relationships of the TAM original model have been checked. However, private self-consciousness and social anxiety do not affect any of the two assumptions of the model. Only public self-consciousness significantly influences perceived ease of use and perceived usefulness. It should be pointed out that the effect of public self-consciousness is negative in both cases. This means that a decrease in this characteristic of the individual significantly increases perceived ease of use and perceived usefulness in terms of their attitude and intention toward online shopping. These results can be understood in the sense that higher public self-consciousness makes individuals give more importance to the opinion or judgment of other people and less importance to their own beliefs about the service, such as usefulness and perceived ease of use.
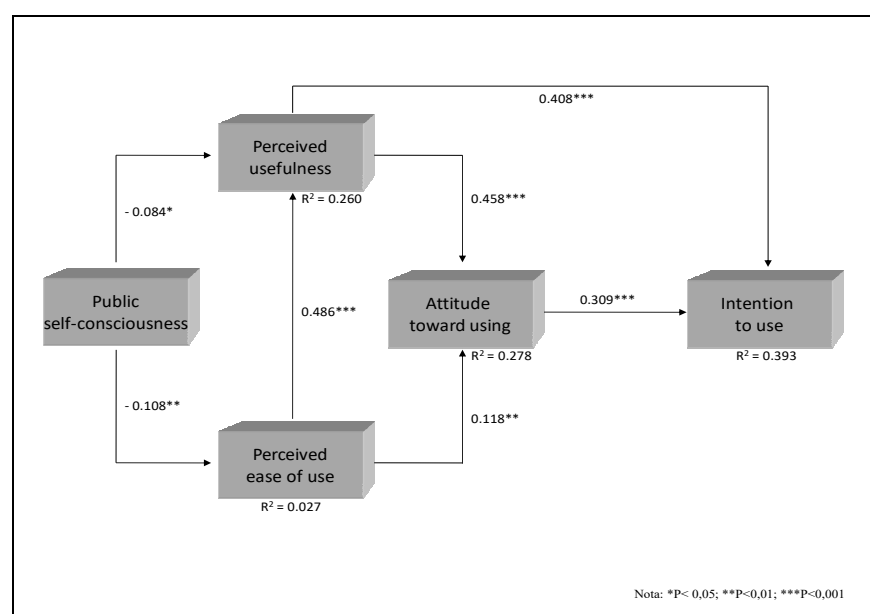
Figure 2. Significant results of the proposed model.

6. Discussion and Conclusions

This paper analyzes the construct of self-consciousness, which contains three dimensions: public self-consciousness, private self-consciousness and social anxiety. These three factors are related to psychological tendencies based on oneself and one's disposition towards the social environment that surrounds them.

Self-consciousness is a relevant psychological characteristic in the behavior of people, but it has been little studied in the field of consumer behavior. Our general objective is to cover this lack in electronic commerce. As the first specific objective, an empirical study was carried out to contrast the influence of the three dimensions of self-consciousness in consumer adoption of online shopping. The results obtained indicate that self-consciousness affects consumer adoption of online shopping. According to Shah and Amjad [28], private self-consciousness obtained the highest scores, closely followed by public self-consciousness and, at a greater distance, by social anxiety. Our results indicate a stronger relationship between public self-consciousness and self-insecurity than in the Gould and Barak [14] study. In addition, usefulness and ease of use can avoid uncertainty in the use of technology. However, as in the study by Sun, Horn and Merrit [13], the fact of trying to avoid uncertainty leads to less public self-consciousness.

In particular, public self-consciousness directly influences perceived usefulness and perceived ease of. Xu [21] warns that the public self-consciousness of young consumers can influence their compulsive buying decisions. In this sense, buyers with high public self-consciousness do not look so much for the usefulness of the purchased product. Therefore, we can conclude that public self-consciousness has a negative effect on cognitive factors such as usefulness and ease of use. Furthermore, private self-consciousness and social anxiety do not have a direct impact on these two constructs. This means that private self-consciousness and social anxiety do not imply an intention to accept online shopping. Therefore, hypotheses H1 and H2 have been accepted, in addition to the basic hypotheses posed by the Technology Acceptance Model (TAM): hypotheses H7, H8, H9 and H10.

The second specific objective of this study was that the adoption of online shopping would have a greater interest for those individuals to whom the use of this technology would give a higher degree of social disinhibition. The results seem to support this idea to a limited extent. There is evidence that anonymity and lack of face-to-face communication on the internet can influence the adoption of online shopping. These results are in line with the studies of Morahan-Martin and Schumacher [38], but in the consumer field since the decrease in public self-consciousness has an effect on the adoption of online

shopping. In this way, low public self-consciousness subjects are more likely to use the internet for purchasing. The internet can be considered as a form of social communication complementary to face-to-face interaction, which can reduce individuals' social limitations, increasing their disinhibition in online shopping.

One of the advantages of this study compared to others on self-consciousness in the consumer field is that it empirically analyzes the three dimensions of self-consciousness at the same time. Most of the previous work on the subject has focused on just one dimension, with few on two of the dimensions, and even fewer on the three dimensions. The analysis of the three dimensions together, comparing the relative influence of each of them, is closer to reality. Previous studies that have focused on one or two components of self-consciousness entail a restriction of information and a bias in that self-consciousness must be considered conceptually as a combination of the three dimensions.

Regarding the implications of this work, it is necessary to understand consumer buying behavior in order to design an adequate marketing strategy to attract the consumer to purchase products offered by organizations. The electronic ticket is a basic or standardized product, hence consumers do not buy it for the social impact they can cause, as Burnkrant and Page [10] state, but quite the opposite. In line with Bushman [11], individuals high in public self-consciousness may reject products that they consider more basic and cheaper than those offered in other sales channels. Therefore, passenger transport companies can adopt marketing strategies to market their tickets online focusing on the internal motivations of individuals rather than the public image that can be conveyed with the purchase of these products.

The main limitation of this paper is the use of a homogeneous sample with individuals of similar ages and educational levels. Although it is not possible to generalize these results to the whole population, a homogeneous sample is useful and advisable to verify theoretical models based on the study of behavior [68]. Another limitation of this study is the fact that it is based on a single product, even if it is one of the best-selling products on the internet. On the other hand, a widely recognized model has been used to explain the adoption of technology, the Technology Acceptance Model (TAM), although it is based on a more utilitarian perspective. However, future research can analyze online shopping from a more hedonistic approach and compare it with the utilitarian perspective. It is also possible to study self-consciousness profiles that identify the three dimensions in the population in relation to the use of social networks, given its relation to the psychosocial characteristics of people.

Furthermore, it is possible to study how different types of self-consciousness can react by inhibiting or preventing the co-creation of value from the dominant logic of service [69,70]. Other relationships within the Technology Acceptance Model (TAM) can be analyzed in future studies, such as observing the influence of ease of use on the intention to buy online. Likewise, the direct relationships of self-consciousness with attitudes can be analyzed and, as suggested by Marquis and Filiatrault [18], with the intention of use. In addition, the moderating effect of self-consciousness in the relationships between the variables considered can be contrasted, as proposed by previous studies [12,13]. It is possible to contemplate other relationships in the model such as the influence of perceived ease of use on the intention to use technology. This model can be studied in different e-channels and e-channel touchpoints in the lens of Wagner, Schramm-Klein and Steinmann [71].

Appendix A

Scales	Items
ease of use	Using the self-service system through internet to book air tickets . . .
	- be/not be complicated
	- be/not be confusing
	- take a lot of/little effort
	- require a lot of/little work
usefulness	Using the self-service through internet to book air tickets . . .
	- means I will get/not get what I ordered
	- is something I expect/do not expect to work well
	- will/will not result in errors
	- will be/not be reliable
attitudes	How do you describe your feelings towards using the self-service through Internet to buy air tickets?
	- extremely good/extremely bad
	- extremely pleasant/extremely unpleasant
	- extremely harmful/extremely beneficial
	- extremely favorable/extremely unfavorable
intention to use	Would you intend to use the self-service through Internet to buy air tickets?
	- extremely likely/extremely unlikely
	- extremely possible/extremely impossible
	- definitively I will use/definitively I will not use
Self-consciousness	Private Self-consciousness
	- always trying to figure himself out
	- concerned about his style of doing things
	- thinks a lot about himself
	- never takes a hard look at himself
	- generally pays attention to inner feelings
	- constantly thinks about reasons for doing things
	- steps back to examine himself from a distance
	- quickly notices changes in own mood
	- knows his cognitive process while solving a problem
	- percentage of variances explained
	Public Self-consciousness
	- cares about presenting himself to others
	- self-conscious about the way he looks
	- worries about making a good impression
	- before leaving the house, checks how he looks
	- concerned about what others think of him
	- usually aware of his appearance
	- percentage of variances explained
	Social Anxiety
	- takes time to get over shyness in new situations
	- hard for him to work when someone is watching
	- is embarrassed very easily
	- finds it easy to talk to strangers
	- feels nervous when speaking in front of a group
	- large groups make him nervous

References

1. Arce-Urriza, M.; Cebollada-Calvo, J.J. Elección del canal de compra y estrategia multicanal: Internet vs. tradicional. Aplicación a la compra en una cadena de supermercados. *Cuad. Econ. Dir. Empresa* **2013**, *16*, 108–122. [CrossRef]
2. Fierro, A. *Manual de Psicología de la Personalidad*; Ediciones Piados Ibérica: Barcelona, Spain, 1996.
3. Jiménez, J.A. Autoconciencia, personalidad sana y sistema autorreferente. *Ann. Psicol.* **1999**, *15*, 169–177.
4. Duval, S.; Wicklund, R.A. *A Theory of Effects of Objective Self-Awareness*; Academic: New York, NY, USA, 1972.
5. Fenigstein, A.; Scheier, M.F.; Buss, A.H. Public and private self-consciousness: Assessment and theory. *J. Consult. Clin. Psychol.* **1975**, *43*, 522–527. [CrossRef]
6. Carver, C.S.; Scheier, M.F. *Attention and Self-Regulation: A Control-Theory Approach to Human Behavior*; Springer: New York, NY, USA, 1981.
7. López-Bonilla, J.M.; López-Bonilla, L.M. Self-service technology versus traditional service: Examining cognitive factors in the purchase of the airline ticket. *J. Travel Tour. Mark.* **2013**, *30*, 497–508. [CrossRef]
8. Scandell, D.J.; Scandell, D. The personality correlates of public and private self-consciousness from a five-factor perspective. *J. Soc. Behav. Pers.* **1998**, *13*, 579–592.
9. Abe, S.; Bagozzi, R.P.; Sadarangani, P. An investigation of construct validity and generalizability of the self-concept: Self-consciousness in Japan and Unites States. *J. Int. Consum. Mark.* **1996**, *8*, 97–123. [CrossRef]
10. Burnkrant, R.E.; Page, T.J. On the management of self-images in social situations: The role of public self-consciousness. *Adv. Consum. Res.* **1982**, *9*, 452–455.
11. Bushman, B.J. What's in a name? The moderating role of public self-consciousness on the relation between brand label and brand preference. *J. Appl. Psychol.* **1993**, *78*, 857–861. [CrossRef]
12. Dabholkar, P.A.; Bagozzi, R.P. An attitudinal model of technology-based self-service: Moderating effects of consumer traits and situational factors. *J. Acad. Mark. Sci.* **2002**, *30*, 184–201. [CrossRef]
13. Sun, T.; Horn, M.; Merrit, D. Impacts of cultural dimensions on healthy diet through public self-consciousness. *J. Consum. Mark.* **2009**, *26*, 241–250. [CrossRef]
14. Gould, S.J.; Barak, J. Public self-consciousness and consumption behaviour. *J. Soc. Psychol.* **1989**, *128*, 393–400. [CrossRef]
15. Workman, J.E.; Lee, S.H. Relationships among consumer vanity, gender, brand sensitivity, grand consciousness and private self-consciousness. *Int. J. Consum. Stud.* **2013**, *37*, 206–213. [CrossRef]
16. Marquis, M.; Filiatrault, P. Cognitive and affective reactions when facing an additional delay while waiting in line: A matter of self-consciousness disposition. *Soc. Behav. Pers.* **2000**, *28*, 355–376. [CrossRef]
17. Marquis, M.; Filiatrault, P. Understanding complaining responses through consumers' self-consciousness disposition. *Psychol. Mark.* **2002**, *19*, 267–292. [CrossRef]
18. Marquis, M.; Filiatrault, P. Public self-consciousness disposition effect on reactions to waiting in line. *J. Consum. Behav.* **2003**, *2*, 212–231. [CrossRef]
19. Solomon, M.R.; Schopler, J. Self-consciousness and clothing. *Pers. Soc. Psychol. Bull.* **1982**, *8*, 508–514. [CrossRef]
20. Workman, J.E.; Lee, S.H. Vanity and public self-consciousness: A comparison of fashion consumer groups and gender. *Int. J. Consum. Stud.* **2011**, *35*, 307–315. [CrossRef]
21. Xu, Y. The influence of public self-consciousness and materialism on young consumers' compulsive buying. *Young Consum.* **2008**, *9*, 37–48. [CrossRef]
22. Xu, Y.; Summers, T.A.; Belleau, B.D. Who buys American alligator? Predicting purchase intention of a controversial product. *J. Bus. Res.* **2004**, *27*, 1189–1198. [CrossRef]
23. Lennon, S.J.; Kim, M.; Lee, J.; Johnson, K.K.P. Effects of emotions, sex, self-control, and public self-consciousness on Black Friday misbehaviour. *J. Glob. Fash. Mark.* **2017**, *8*, 163–179. [CrossRef]
24. Gould, S.J. Assessing self-concept discrepancy in consumer behaviour: The joint effect of private self-consciousness and self-monitoring. *Adv. Consum. Res.* **1993**, *20*, 419–424.
25. Marquis, M. Self-consciousness disposition sheds lights of consumers' reactions to waiting. *Adv. Consum. Res.* **1998**, *25*, 544–550.
26. Tolbert, S.L.; Kohli, C.; Suri, R. Who pays the price for loyalty? The role of self-consciousness. *J. Prod. Brand Manag.* **2014**, *23*, 362–371. [CrossRef]
27. López-Bonilla, J.M.; López-Bonilla, L.M. Self-consciousness profiles in the acceptance of airline e-ticketing services. *Anatolia* **2015**, *26*, 447–458. [CrossRef]
28. Shah, S.A.M.; Amjad, S. Consumer ethical decision making: Linking moral intensity, self-consciousness and neutralization techniques. *Australas. Account. Bus. Finance J.* **2017**, *11*, 99–130. [CrossRef]
29. Farias, S.A.; Kovacs, M.H.; Silva, J.M. On-line consumer behavior: The flow theory perspective. *Rev. Bras. Gest. Negocios* **2008**, *10*, 27–44. [CrossRef]
30. Saunders, P.L.; Chester, A. Shyness and the Internet: Social problem or panacea? *Comput. Hum. Behav.* **2008**, *24*, 2649–2658. [CrossRef]
31. Matheson, K.; Zanna, M.P. The impact of computer-mediated communication on self-awareness. *Comput. Hum. Behav.* **1998**, *4*, 221–233. [CrossRef]
32. Henderson, L.; Zimbardo, P. *Encyclopedia of Mental Health*; Academic Press: San Diego, CA, USA, 1999.

33. Birnie, S.; Horvath, P. Psychological predictors of internet social communication. *J. Comput. Mediat. Commun.* **2002**, *7*, 13–27. [CrossRef]

34. Bargh, J.A.; McKenna, K.Y.A.; Fitzsimmons, G.M. Can you see the real me? Activation and expression of the "true self" on the internet. *J. Soc. Issues* **2002**, *58*, 33–48. [CrossRef]

35. Cornwell, B.; Lundgren, D.C. Love on the internet: Involvement and misrepresentation in romantic relationships in cyberspace vs. realspace. *Comput. Hum. Behav.* **2001**, *17*, 197–211. [CrossRef]

36. Mckenna, K.Y.A.; Green, A.S.; Gleason, M.E.J. Relationship formation on the internet: What's big attraction? *J. Soc. Issues* **2002**, *58*, 9–32. [CrossRef]

37. Suler, J. The online disinhibition effect. *CyberPsychol. Behav.* **2004**, *7*, 321–326. [CrossRef] [PubMed]

38. Morahan-Martin, J.; Schumacher, P. Loneliness and social uses of the Internet. *Comput. Hum. Behav.* **2003**, *19*, 659–671. [CrossRef]

39. Lorenzo, C.; Alarcón, M.C.; Gómez, M.A. Adopción de redes sociales virtuales: Ampliación del modelo de aceptación tecnológica integrando confianza y riesgo percibido. *Cuad. Econ. Dir. Empresa* **2011**, *14*, 194–205. [CrossRef]

40. Tasai, C.H. Integrating Social Capital Theory, Social Cognitive Theory, and the Technology Acceptance Model to explore a behavioral model of telehealth systems. *Int. J. Environ. Res. Public Health* **2014**, *11*, 4905–4925. [CrossRef] [PubMed]

41. Ijaz, M.F.; Rhee, J. Constituents and consequences of online-shopping in sustainable e-business: An experimental study of online-shopping malls. *Sustainability* **2018**, *10*, 3756. [CrossRef]

42. Santana-Mancilla, P.C.; Anido-Rifón, L.E. The technology acceptance of TV platform for the elderly living alone or in public nursing homes. *Int. J. Environ. Res. Public Health* **2017**, *14*, 617. [CrossRef]

43. Belanche, D.; Casaló, L.V.; Flavián, C. Integrating trust and personal values into Technology Acceptance Model: The case of e-government services adoption. *Cuad. Econ. Dir. Empresa* **2012**, *15*, 192–204. [CrossRef]

44. Kim, J. Platform adoption factors in the internet industry. *Sustainability* **2018**, *10*, 3185. [CrossRef]

45. Venkatesh, V.; Davis, F.D. A theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. *Manag. Sci.* **2000**, *46*, 186–204. [CrossRef]

46. Davis, F.D.; Bagozzi, R.P.; Warshaw, P.R. User acceptance of computer technology: A comparison of two theoretical models. *Manage. Sci.* **1989**, *35*, 983–1003. [CrossRef]

47. Fishbein, M.; Ajzen, I. *Belief, Attitude, Intention and Behaviour: An Introduction to Theory and Research*; Addison-Wesley Publishing: Menlo Park, CA, USA, 1975.

48. Davis, F.D. Perceived usefulness, perceived ease of use, and user acceptance of Information Technology. *MIS Q.* **1989**, *13*, 319–340. [CrossRef]

49. Izquierdo, A.; Martínez, M.P.; Jiménez, A.I. El papel de la conveniencia y de la norma subjetiva en la intención de compra por Internet (B2C): Una aplicación en la industria hotelera. *Rev. Bras. Gest. Negocios* **2011**, *13*, 137–158.

50. Moslehpour, M.; Pham, V.K.; Wong, W.K.; Bilgiçli, I. e-Purchase intention of Taiwanese consumers: Sustainable mediation of perceived usefulness and perceived ease of use. *Sustainability* **2018**, *10*, 234. [CrossRef]

51. Teo, T. Is there an attitude problem? Reconsidering the role of attitude in the TAM. *Br. J. Educ. Technol.* **2009**, *40*, 1139–1141. [CrossRef]

52. Nistor, N.; Heymann, J.O. Reconsidering the role of attitude in the TAM: An answer to Teo (2009a). *Br. J. Educ. Technol.* **2010**, *41*, E142–E145. [CrossRef]

53. López-Bonilla, L.M.; López-Bonilla, J.M. The role of attitudes in the TAM: A theoretically unnecessary construct? *Br. J. Educ. Technol.* **2011**, *42*, E160–E162. [CrossRef]

54. López-Bonilla, L.M.; López-Bonilla, J.M. Explaining the discrepancy in the mediating role of attitudes in the TAM. *Br. J. Educ. Technol.* **2017**, *48*, 940–949. [CrossRef]

55. Ursavas, O.F. Reconsidering the role of attitude in the TAM: An answer to Teo (2009) and Nistor and Heymann (2010), and López-Bonilla and López-Bonilla (2011). *Br. J. Educ. Technol.* **2013**, *44*, E22–E25. [CrossRef]

56. Nitz, C.; Roldán, J.L.; Cepeda, G. Mediation analysis in Partial Least Squares path modeling: Helping researchers discuss more sophisticated models. *Ind. Manage. Data Syst.* **2016**, *116*, 1849–1864. [CrossRef]

57. Richter, N.F.; Cepeda, G.; Roldán, J.L.; Ringle, C. Editorial: European management research using Partial Least Squares Structural Equation Modeling (PLS-SEM). *Eur. Manag. J.* **2016**, *34*, 589–597. [CrossRef]

58. Jöreskog, K.G.; Wold, H. The ML and PLS techniques for modelling with latent variables: Historical and competitive aspects. In *Systems under Indirect Observation*; Jöreskog, K.G., Wold, H., Eds.; North-Holland: Amsterdam, The Netherland, 1982; Part 1; pp. 263–270.

59. Dabholkar, P.A. Decision-Making in Consumer Trial of Technology-Based Self-Service Options: An Attitude-Based Choice Model. Ph.D. Thesis, Georgia State University, Atlanta, GA, USA, 1991.

60. Dabholkar, P.A. Incorporating choice into an attitudinal framework: Analyzing models of mental comparison processes. *J. Consum. Res.* **1994**, *21*, 100–118. [CrossRef]

61. Dabholkar, P.A. Consumer Evaluations of New Technology-based Self-service options: An Investigation of Alternative Models of Service Quality. *Int. J. Res. Mark.* **1996**, *13*, 29–51. [CrossRef]

62. Ajzen., I.; Fishbein., M. *Understanding Attitudes and Predicting Social Behaviour*; Prentice-Hall: Englewood Cliffs, NJ, USA, 1980.

63. Stoklasa, J.; Talášek, T.; Stoklasová, J. Semantic differential for the twenty-first century: Scale relevance and uncertainty entering the semantic space. *Qual. Quant.* **2019**, *53*, 435–448. [CrossRef]

64. Scheier, M.F.; Carver, C.S. The self-consciousness scale: A revised version for use with general populations. *J. Appl. Soc. Psychol.* **1985**, *15*, 687–699. [CrossRef]
65. Hair, J.F.; Anderson, R.E.; Tatham, R.L.; Black, W.C. *Análisis Multivariante*; Pearson Education: Madrid, Spain, 2004.
66. Fornell, C.; Larcker, D. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **1981**, *18*, 39–50. [CrossRef]
67. Chin, W.W. The Partial Least Squares Approach to Structural Equation Modeling. In *Modern Methods for Business Research*; Marcoulides, G.A., Ed.; Lawrence Erlbaum Associates: Hillsdale, NJ, USA, 1998; pp. 295–336.
68. Calder, B.J.; Phillips, L.W.; Tybout, A.M. Designing research for application. *J. Consum. Res.* **1981**, *8*, 197–207. [CrossRef]
69. Vargo, S.L.; Lusch, R.F. Evolving to a New Dominant Logic. *J. Mark.* **2004**, *68*, 1–17. [CrossRef]
70. Vargo, S.L.; Lusch, R.F. Service-Dominant Logic: Continuing the evolution. *J. Acad. Mark. Sci.* **2008**, *36*, 1–10. [CrossRef]
71. Gerhard, W.; Schramm-Klein, H.; Steinmann, S. Online retailing across e-channels and e-channel touchpoints: Empirical studies of consumer behavior in the multichannel e-commerce environment. *J. Bus. Res.* **2020**, *107*, 256–270. [CrossRef]