

## Article

# Influence of Consumer Trust, Return Policy, and Risk Perception on Satisfaction with the Online Shopping Experience

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**Abstract:** This study examines the interplay of consumer trust, return policies, and risk perception in shaping satisfaction with online shopping experiences in a business to consumer e-commerce context. Employing a conceptual model tested through Partial Least Squares-Structural Equation Modeling (PLS-SEM), it evaluates how these factors individually and collectively influence consumer satisfaction. The findings confirm that consumer trust reduces perceived risk and enhances shopping satisfaction. Contrary to expectations, attractiveness of free returns has no significant impact on either risk perception or satisfaction, while clear return policies positively influence satisfaction but not risk perception. Additionally, the study reveals a quadratic relationship between risk perception and satisfaction, suggesting that an optimal level of perceived risk maximizes satisfaction, deviating from prior research advocating for minimal perceived risk. These results offer new insights into consumer behavior in online retail, highlighting the nuanced role of risk and emphasizing the strategic importance of trust and return policies. The paper concludes by discussing managerial implications and suggesting directions for future research.

**Keywords:** consumer trust; risk perception; return policy; online shopping satisfaction; B2C e-commerce



Academic Editors: Anna Lewandowska, Justyna Berniak-Woźny and Naveed Ahmad

Received: 13 January 2025

Revised: 24 February 2025

Accepted: 25 February 2025

Published: 26 February 2025

**Citation:** Hipólito, F.; Dias, Á.; Pereira, L. Influence of Consumer Trust, Return Policy, and Risk Perception on Satisfaction with the Online Shopping Experience. *Systems* **2025**, *13*, 158. <https://doi.org/10.3390/systems13030158>

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## 1. Introduction

Electronic commerce (e-commerce) has been defined by the Organization for Economic Cooperation and Development (OECD) as the ordering of goods and services over the internet while payment and delivery of the goods or services can be conducted either online or offline [1].

This concept has seen enormous growth over the last two decades, radically transforming the retail sector and significantly changing consumers' purchasing behaviors [2]. This accelerated growth can be attributed to several factors, including technological advances, greater accessibility to the internet, and changes in consumer preferences [3]. However, the expansion of e-commerce has also brought new concerns, especially in relation to online trust, return policies, and risk perception, which play crucial roles in consumer satisfaction, especially in the type of e-commerce called Business to Consumer (B2C), which is the most explored [4], and which is a concept defined by the direct sale of a company's product to many potential consumers online [5]. This type of e-commerce is the most common type of e-commerce, where the economic volume of transactions and the amount of goods exchanged exceeds any other type of e-commerce [5].

While previous studies have explored these factors individually (e.g., [2,4]), this research examines their combined effects in a B2C e-commerce context, revealing novel

insights. Specifically, this study challenges the prevailing notion that minimal perceived risk universally maximizes satisfaction by uncovering a quadratic relationship, suggesting an optimal level of perceived risk exists. Furthermore, understanding the intricate relationship between online trust, return policies, and risk perception is crucial for enhancing consumer satisfaction in e-commerce. As such, this study delves into how these factors collectively influence consumer satisfaction, revealing that trust in online retailers significantly reduces perceived risk, which, in turn, enhances satisfaction. Clear and well-communicated return policies further bolster consumer confidence, mitigating perceived risks and contributing to a positive shopping experience. Consumer satisfaction in the context of e-commerce depends not only on the quality of the product, but also on intangible factors such as trust in the seller, clarity, the generosity of return policies and the minimization of perceived risks, with several studies showing that a positive shopping experience, facilitated by high levels of trust and low risk perceptions, results in greater customer loyalty and better evaluations of the online store [6,7].

According to Greator and Mitchell [8], retailers use return policies as a security tool for the risk that the consumer has in a purchase. This strategy makes it possible to offer greater security to the customer and increase their trust in the company. For this reason, having a returns policy has become one of the most competitive weapons that influence product sales [9]. In addition to a clear returns policy, there is the possibility of promoting the attractiveness of free returns, a strategy that has proven effective in increasing consumer confidence. Several studies indicate that generous return policies, which include free returns, can reduce the perception of risk associated with online shopping [10]. When consumers know they can return products at no extra cost, they feel safer making purchases, which increases their trust in the seller and their overall satisfaction with the shopping experience [11,12].

Perceived risk can manifest itself in various ways, including fear of fraud, concerns about product quality, and fears about the return's process [13]. Clear and favorable return policies are key to mitigating these concerns. When consumers perceive that they have viable and hassle-free options for returning products, the perceived risk decreases significantly, which can lead to greater satisfaction with the shopping experience [14].

However, the existing literature on this topic is not sufficiently explored. Due to the improvements in e-commerce in recent years, it is crucial to explore how the dynamics between consumer online trust, return policies, risk perception, and satisfaction with the shopping experience have changed. To this end, this study has three objectives: 1. To explore how risk perception is affected by consumer online trust in the purchase; 2. To understand how consumer online trust and the offer of a clear and/or free return policy affect satisfaction with the shopping experience; 3. To explore how the perception of risk can influence satisfaction with the shopping experience. This study explores how these variables interact and how their influence on consumer satisfaction is essential for online retailers who wish to remain competitive in today's market. To relate these variables, this exploratory study presents a conceptual model, empirically tested using PLS-Structural Equation Modeling (PLS-SEM) techniques.

## 2. Literature Review

### 2.1. Key Concepts

Online trust is a determining factor in e-commerce, as it directly affects the consumer's willingness to shop online. Studies show that trust can significantly reduce the perception of risk and, consequently, increase consumer satisfaction [7]. To this end, it is important for companies to develop mechanisms that increase consumer trust, such as security certifications, ratings/comments from previous customers, and robust privacy policies, all

measures that can help reduce the perception of risk [15]. According to Gefen et al. [16], trust is essential to reduce the uncertainty inherent in online transactions, where physical interaction between buyer and seller is non-existent. This trust can be influenced by various elements, such as the reputation of the site, the security of the transactions, and the clarity of the information provided [17]. One specific aspect that influences trust and, consequently, consumer satisfaction, is the return policy adopted by online retailers.

The relationship between trade and technology has always existed and will continue to do so. Developments and advances in Information and Communication Technologies (ICT) have enabled developments in various fields, such as global trade. Consequently, the processes of many areas of activity (commerce, economics, health, banking, clothing, etc.) have evolved and grown with these advances [18]. For this reason, traditional commerce will not be able to respond to modern needs and will need to adapt and come up with new ideas [19,20]. Today, the internet has become an indispensable component in people's lives, with people from all over the world stating that the internet plays a significant role in their lives and has led to the production of job opportunities and developments in business and commerce [21,22]. Thanks to its enormous impact on people's lives and on the various areas of life in a developed society, information technology is considered one of humanity's greatest innovations. Its application in operations related to economic and commercial processes has led to the creation of a new dimension, known as e-commerce, which plays a significant role in global economic affairs [23]. The developments achieved in recent decades in this technology have resulted in a revolution in the field of commerce and business, dramatically altering the lifestyle of many people in developed countries [24].

E-commerce has been defined by the OECD as the ordering of goods and services over the internet while payment and delivery of the goods or services can be conducted either online or offline [1]. The global volume of e-commerce is growing every year with more people opting for this option. In 2014, e-commerce turnover was USD 1.34 trillion, in 2019 it reached USD 3.35 trillion, in 2023 it was USD 5.78 trillion, and in 2027, it is expected to reach USD 8.03 trillion [25], having peaked in 2017 with an impressive 28% increase in volume compared to 2016 [26]. COVID-19 has provided additional impetus for e-commerce, something that is clear when we look at the growth this modality experienced in 2020 (25.7%) compared to the previous year (20.5%) [25]. This growth trend is expected to continue, with the percentage of sales that e-commerce represents in world retail reaching 22.6% in 2027, a trend that has been growing since 2022, when e-commerce accounted for 18.7% [26].

E-commerce is seen as one of the best ways in which ICT is applied for economic purposes. This form of selling can support an entity's economic growth and development, improve its commercial efficiency, and offer an easier process for acquiring a good or service. With this reality becoming increasingly present in people's and companies' daily lives, different organizations in different industries must use and apply these technologies so that they can benefit from their competitive advantages [27].

Understanding the motives and factors of online consumers in B2C e-commerce leads to successful implementation of an organization's internet marketing strategy [28]. The main motives of online shoppers, according to Pilik et al. [29], are as follows: (i) Discovering lower prices, because promotional campaigns offering low prices have a positive impact on sales growth even though they can contribute to reducing the company's profit; (ii) The convenience of the process, because online services are always available and products are delivered to the destination of the consumer's choice, which helps consumers save time; (iii) The ease of quickly comparing products.

However, for companies with a presence in e-commerce, building trust in this medium is very important because the consumer experience is not like in traditional commerce

where the physical product is acquired at the time of purchase. In online business, it is necessary to ensure that after the customer makes the purchase, the product arrives in optimal condition, and in a reasonable time, to the buyer. For this reason, the reputation of the company's website is linked to the proper functioning of the online purchase logistics process, which is consequently linked to the company's overall reputation [30,31].

As e-commerce grows, so does the number of returned products. Product returns are an important and necessary component of customer relationship management in virtually all product sales companies, with clothing companies having return rates of up to 50% of their sales [32]. According to Blanchard [33], in the US, product returns cost producers and retailers around USD 100 billion annually in lost sales and reverse logistics, which translates into an average reduction of 3.8% in profit per retailer or producer. These costs are seen as an unavoidable economic cost for managing the relationship with customers, and possibly for this reason, product returns are a metric that is not considered by retailers when decisions need to be made [34]. By way of example, according to Petersen and Kumar [34], in a qualitative questionnaire of 56 retailers, around half of the retailers did not include product return metrics in their decisions on the selection and optimal allocation of resources. This means that online retailers evaluate the performance of their marketing initiatives (coupons, newsletters, catalogs) by considering their effect on sales, without considering the influence of these initiatives on product returns, which cost organizations money. In addition, online retailers allow dissatisfied customers to promptly report their dissatisfaction as unresolved product returns via social media, something that can greatly damage these online retailers [35].

## 2.2. Hypotheses Development and Conceptual Model

Consumer trust in online retailers is a crucial metric in managing customer relationships in e-commerce. Recent studies show that consumers who perceive a website as reliable and secure tend to make more purchases, demonstrating that online trust directly affects purchase intent and customer satisfaction. For example, a 2023 study highlights that trust in online retailers is essential for increasing purchase intentions and customer satisfaction, especially in contexts where the convenience and usability of the website are determining factors [36].

It is very important for e-commerce companies to identify ways of retaining customers in the long term, as this leads to more profits and revenue [37]. The same author states that customers who are satisfied with the website's service not only return to shop on the same website but also become loyal. Therefore, the concept of loyalty is important for retaining customers [38,39] and customers who trust online retailers are also customers who are usually loyal [40]. With a positive shopping experience and strengthened trust, the perceived risk of making a purchase from an online retailer decreases. Risk perception has always been a major challenge in online commerce because consumers consciously and unconsciously make judgments about products and services online [16]. According to Saoula et al. [41], this trustworthiness and loyalty in the online supplier reduces the perception of risk when buying online and has a positive influence on customer retention. Therefore, the hypothesis presented is as follows:

**H1A:** *Consumer online trust has a negative relationship with risk perception.*

As a rule, in e-commerce, where products cannot be tested or examined before purchase, retailers must ensure that their products will be delivered as expected. Therefore, consumer online trust becomes an important factor affecting satisfaction with the online shopping experience [42]. Satisfaction is one of the most important conditions for ensuring customer loyalty [43] and is the result obtained from the comparison between expectations

and actual performance [44], while the consumer's shopping experience strengthens the relationship between performance expectations and satisfaction [45]. Therefore, the reliability of receiving the exact products that were ordered positively influences online shopping satisfaction [46]. Therefore, the hypothesis presented is as follows:

**H1B:** *Consumer online trust has a positive relationship with satisfaction with the shopping experience.*

According to Wood [47], a free returns policy encourages customers to order items more hastily, something that is helped by the ease and time savings that an online purchase gives a consumer, which according to Koufaris et al. [48] increases the number of unplanned purchases.

In the context of Green Communication for more package-free e-commerce returns, our findings indicate that push factors, such as consumer dissatisfaction, and the mooring factor, specifically the habit of returning items by mail, had only a minor influence on switching intention. Contrary to previous studies, among the pull factors—service convenience and green value—the impact of green value on switching intention was notably weaker than that of service convenience [49]. Ultimately, convenience emerged as the most significant factor in green communication. Das and Kunja [50] identified two main categories of reasons behind online product return behavior. The first category, company-related factors, includes issues such as receiving an unsuitable product, delivery problems, misleading advertisements, and the spread of manipulated information. The second category, customer-related factors, encompasses buyer's remorse, wardrobing, and impulsive purchasing.

Therefore, a free returns policy increases impulse buying, something that is amplified by the ease of making an online purchase, and according to Lantz and Hjort [51], free returns facilitate impulse buying because consumers face no immediate risk. That said, the hypothesis is as follows:

**H2A:** *Attractiveness of free returns has a negative relationship with risk perception.*

Minglun et al. [52] state that as e-commerce grows globally, consumers increasingly expect free deliveries and consequently more free returns. However, processing customer returns is costly for online retailers. The loss associated with online returns in the United States in 2019 was estimated at 9.6% of total online retail sales, leading to online retailers losing around USD 41 billion in sales [53]. Because of this, to reduce and limit the costs of these returns, some online retailers choose to tighten their free return policies [54]. However, for a customer, having a free return policy causes them to change their purchasing behavior, because according to Lantz and Hjort [51], having the possibility of making free returns is associated with a higher frequency of orders, a lower average order value, a lower number of items purchased, and a higher probability of returning products. Based on this literature, the hypothesis is as follows:

**H2B:** *Attractiveness of free returns has a positive relationship with satisfaction with the shopping experience.*

Return policies can be categorized as either lenient or strict based on the ease of the return process. Strict policies, by increasing exit costs, create barriers that discourage returns. However, these high exit costs and reduced flexibility can increase consumer dissatisfaction, ultimately decreasing both initial purchases and repurchases [55]. Reducing exit costs and increasing the level of customer satisfaction are the characteristics that make up tolerant return policies, which increase the purchase and repurchase rate [56]. Online consumers are more sensitive to return policies than traditional retail consumers [57]. In

online shopping, a lenient return policy can lead to a more favorable product evaluation, and consumers are more likely to believe that favorable return policies are indicative of high-quality products since these companies stand behind their products.

Conversely, consumers who encounter a strict returns policy are more likely to question the quality of the products [58]. However, the more lenient the returns policy, the more costs retailers will have to pay to accept returns [59]. Rogers and Tibben-Lembke [60] found that a clear and attractive returns policy is one of the most important tools for attracting consumers. Mukhopadhyay and Setaputra [61] used an analytical model to examine the effects of online retailers' return policies on their profits. However, few [47,62] have investigated the influence of online retailers' return policy on consumer behavior and perception. Therefore, the hypotheses presented are as follows:

**H3A:** *A clear and easy (favorable) return policy is negatively associated with perceived risk in online shopping.*

**H3B:** *A clear and easy (favorable) return policy is positively associated with satisfaction with the online shopping experience.*

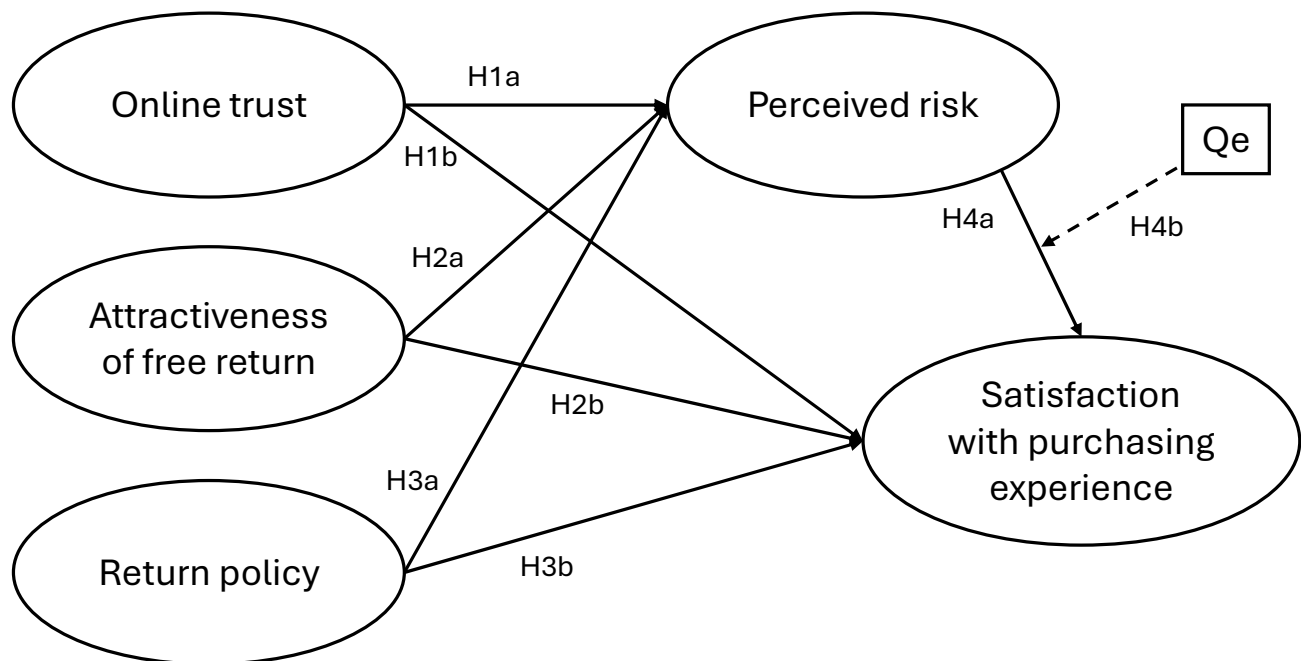
In online commerce, risk plays a vital role in consumer buying behavior [63]. This consumer buying behavior is strongly explained by risk perception [64]. Risk perception is defined as "the nature and amount of uncertainty or consequences experienced by the consumer when contemplating a particular purchase decision" [65]. This feeling of uncertainty increases when the consumer is unsure whether the purchase made will allow them to obtain the products they have bought, something that is found in e-commerce due to the nature of the activity being spatially remote [66]. Of the various risks associated with online commerce, the most common perceived risks are low-quality products, poor after-sales service, and disclosure of customers' personal information [67]. Peng et al. [68] state that giving service guarantees (promises to customers that what will be delivered is what is advertised) can reduce the perception of risk in the purchasing process; however, Udo et al. [69] argue that a reduced perception of risk leads to a higher perceived quality of service, but not necessarily consumer satisfaction or purchase intention. On the opposite point, Mortimer et al. [70] state that when the perceived risk is low, the consumer will be satisfied and will develop positive purchasing behaviors, something that is supported by the conclusions of the study by Miao et al. [71]. Guru et al. [72] state that a consumer will not make an online purchase again if they perceive a high purchase risk. On this topic, the consensus in the literature is that the lower the perception of risk, the greater the satisfaction of the consumer and their shopping experience. Therefore, the hypotheses are as follows:

**H4A:** *Risk perception is negatively related to satisfaction with the shopping experience.*

The inclusion of a quadratic term for risk perception in the model allows for the exploration of a non-linear relationship between risk perception and satisfaction with the shopping experience. This approach is grounded in the theoretical understanding that risk can have both positive and negative valences in consumer behavior [68]. While excessive risk can lead to anxiety and dissatisfaction, a certain degree of risk can also contribute to excitement and a sense of adventure, potentially enhancing the shopping experience [50,72]. The quadratic term allows us to investigate whether an optimal level of perceived risk exists that maximizes satisfaction, rather than assuming a strictly linear relationship.

**H4B:** Risk perception has an inverted u-shaped relationship with satisfaction with the shopping experience.

The conceptual model is presented in Figure 1.



**Figure 1.** Conceptual model. Note: QE = Quadratic effect.

### 3. Materials and Methods

#### 3.1. Data Collection and Sample

For data collection, a convenience sample was used because there is no information on the total number of consumers, so it is not possible to stratify the sample.

However, the aim was to have a diverse sample, from different age groups and with different incomes. An online questionnaire was used to collect the data. This questionnaire was developed through a literature review of various scientific articles that analyzed the variables studied by developing questions about them. A pre-validation of the questionnaire was also carried out with 8 respondents to check that it was correctly perceived. The final questionnaire was posted online and received a total of 212 responses. This sample size is considered adequate for PLS-SEM analysis since it includes more than 10 responses for each variable considered in the conceptual model. The online survey was conducted in Portugal between December 2023 and April 2024. Participants were recruited through a convenience sampling method using online platforms and social media channels. The choice of Portugal as the study location was motivated by its status as a developed European country with high internet penetration and active e-commerce participation, offering a relevant context to examine online shopping behavior. Table 1 shows the demographic data for the questionnaire sample.

**Table 1.** Sample descriptives.

Sample Characteristics	Frequency	Percentage (%)
<b>Gender</b>		
Female	121	57.08%
Male	91	42.92%
Other	0	0.00%
<b>Age</b>		
18–24	34	16.04%
25–34	93	43.87%
35–44	35	16.51%
45–54	29	13.68%
55–64	16	7.55%
65+	5	2.36%
<b>Highest Level of Education</b>		
Basic Education (up to 9th grade)	3	1.42%
Secondary Education (up to 12th grade)	14	6.60%
Higher Education—Professional Higher Technical Course	3	1.42%
Higher Education—Bachelor’s or Licentiate Degree	83	39.15%
Postgraduate	20	9.43%
Higher Education—Pre-Bologna degree or Master’s degree	85	40.09%
Higher Education—Doctorate	4	1.89%
<b>Professional Status</b>		
Paid employment (includes professional internship)	177	83.49%
Student or trainee	28	13.21%
Retired	1	0.47%
Unemployed	6	2.83%
<b>Net Monthly Income</b>		
No income	27	12.74%
Up to EUR 500	2	0.94%
EUR 501–700	1	0.47%
EUR 701–900	12	5.66%
EUR 901–1100	28	13.21%
EUR 1101–1300	32	15.09%
EUR 1301–1500	34	16.04%
EUR 1501–1800	35	16.51%
EUR 1801–2200	21	9.91%
EUR 2201–2900	10	4.72%
More than EUR 2900	10	4.72%

### 3.2. Variables

This study used existing scales to measure all the variables. To measure the four items of Online Consumer Trust, the work of Saoula et al. [41] was used as a basis, while the two items of Return Policy and the five items of Attractiveness of Free Returns were taken and adapted from the work of Urvashi et al. [73]. The four Risk Perception items were based on the work of Han and Li [74]. The three items on Satisfaction with the Shopping Experience were taken from the work of Sharma and Aggarwal [75]. The five variables studied were measured using seven-point Likert scales anchored at 1 (strongly disagree) and 7 (strongly agree). The survey items are presented in the Appendix A.

## 4. Results

The SEM model was used to test the conceptual model. More specifically, the Partial Least Squares (PLS) technique was used, which is a technical variation of structural equation modeling based on variance, using SmartPLS 4 software [76]. Following a two-stage approach, we first assessed the measurement model's reliability and validity before evaluating the structural model. To ensure the quality of the measurement model, we examined individual indicators of reliability, convergent validity, internal consistency, and discriminant validity [77]. All standardized factor loadings exceeded 0.6 (minimum 0.63) and were significant ( $p < 0.001$ ), supporting the individual indicator reliability [77]. The reliability of the internal consistency was confirmed because all the values of Cronbach's alpha ( $\alpha$ ) and the composite reliability (CC) of the constructs exceeded the cut-off point of 0.7 (see Table 2) [75].

**Table 2.** Evaluation of the measurement model.

Latent Variables	$\alpha$	CC	AVE	COC	DGP	PD	PR	SEC
Online Consumer Confidence (COC)	0.760	0.847	0.583	<b>0.764</b>	0.145	0.281	0.514	0.748
Attractiveness of Free Returns (AFR)	0.820	0.868	0.571	0.075	<b>0.756</b>	0.537	0.145	0.136
Return Policy (DP)	0.751	0.875	0.779	0.221	0.422	<b>0.883</b>	0.088	0.317
Risk Perception (RP)	0.843	0.895	0.682	−0.422	0.100	−0.031	<b>0.826</b>	0.293
Satisfaction with the Shopping Experience (SEC)	0.841	0.904	0.759	0.614	0.131	0.283	−0.257	<b>0.871</b>

**Note:**  $\alpha$ —Cronbach's Alpha; CC—Composite Reliability; AVE—Average Variance Extracted. The numbers in bold are the square root of the AVE. Below the diagonal are the correlation values between the various variables. Above the diagonal, the values are the HTMT ratios.

Convergent validity was confirmed by three findings: (1) all items loaded positively and significantly on their respective constructs (as noted above); (2) all constructs had CC values higher than 0.70; and (3) the average variance extracted (AVE) for all constructs exceeded the 0.50 threshold (Table 2) [78]. Discriminant validity was then assessed using two approaches. Firstly, the Fornell and Larcker criterion was used. This criterion requires that the square root of the SEM of a construct (shown diagonally with bold values in Table 2) is greater than its highest correlation with any construct [77]. Table 2 shows that this criterion is met for all constructs. Secondly, the heterotrait-monotrait ratio of the correlations ratio (HTMT) criterion was used ([77,79]).

As Table 2 shows, all HTMT ratios are below the more conservative threshold value of 0.85 [77,79]. These findings provide further evidence of discriminant validity. The structural model was then evaluated by examining the sign, magnitude, and significance of the structural path coefficients; the  $R^2$  value for each endogenous variable (as a measure of predictive accuracy); and the Stone–Geisser  $Q^2$  values (as a measure of predictive relevance). However, collinearity was assessed before the structural model was evaluated [77]. The VIF values ranged from 1.00 to 3.42, which is below the indicative critical value of 5 [80]. These values indicate that there is no collinearity. The coefficient of determination,  $R^2$ , values for the two endogenous variables Perception of Risk and Satisfaction with the Shopping Experience were 0.195 and 0.435. These values exceed the 10% threshold [81]. The  $Q^2$  values for the endogenous variables (Risk Perception: 0.161 and Satisfaction with the Shopping Experience: 0.337) were above zero, which indicates the predictive relevance of the model. Bootstrapping with 5000 subsamples was used to assess the significance of the parameter estimates [77].

The results in Table 3 show that consumer online trust has a negative effect on risk perception (the higher the trust, the lower the risk) ( $\beta = -0.434$ ,  $p < 0.001$ ) and that consumer online trust has a positive effect on satisfaction with the shopping experience ( $\beta = 0.554$ ,  $p < 0.001$ ). These results support hypotheses H1A and H1B, respectively. The attractiveness of free returns has no significant effect on risk perception ( $\beta = 0.128$ , n.s.) or on satisfaction with the shopping experience ( $\beta = 0.010$ , n.s.), so hypotheses H2A and H2B are not supported. The return policy does not have a significant effect on risk perception ( $\beta = 0.011$ , n.s.) but it does have a positive effect on satisfaction with the shopping experience ( $\beta = 0.141$ ,  $p < 0.05$ ), so hypothesis H3A is not supported by the model, but hypothesis H3B is supported. The perception of risk has no significant effect on satisfaction with the shopping experience (the lower the risk, the greater the satisfaction with the shopping experience) ( $\beta = -0.047$ , n.s.), so hypothesis H4A is not supported. Finally, the perception of risk and its quadratic relationship with satisfaction with the shopping experience has a positive effect ( $\beta = 0.179$ ,  $p < 0.01$ ), so hypothesis H4B is supported.

**Table 3.** Structural model assessment.

	Original Sample ( $\beta$ )	Standard Deviation	Statistics $t$	$p$ -Values	Result
Online Consumer Confidence → Risk Perception	−0.434	0.053	8.219	0.000	Supported
Online Consumer Confidence → Satisfaction with Shopping Experience	0.554	0.074	7.468	0.000	Supported
Attractiveness of Free Returns → Risk Perception	0.128	0.089	1.427	0.154	Not Supported
Attractiveness of Free Returns → Satisfaction with the Shopping Experience	0.010	0.067	0.153	0.878	Not Supported
Return Policy → Risk Perception	0.011	0.081	0.141	0.887	Not Supported
Return Policy → Satisfaction with the Shopping Experience	0.141	0.063	2.250	0.024	Supported
Risk Perception → Satisfaction with the Shopping Experience	−0.047	0.067	0.700	0.484	Not Supported
EQ (Risk Perception) → Satisfaction with the Buying Experience	0.179	0.056	3.177	0.001	Supported

## 5. Discussion

The results of this study are based on three strands of analysis: 1. the influence of consumer confidence on risk perception, 2. the relationship between return policy and satisfaction with the shopping experience, and 3. the relationship between risk perception and satisfaction with the shopping experience.

### 5.1. Consumer Confidence in Risk Perception

According to the study, consumer confidence has a negative linear relationship with perceived risk, so that the lower the confidence, the greater the perceived risk. This result is in line with the conclusions of the research work by D'Alessandro et al. [82]. The authors concluded that if the perceived risk is high, it is a significant barrier to making an online purchase. These results reinforce the importance of online retailers being perceived as trustworthy and that their reputation influences a consumer's purchasing decision.

### 5.2. Return Policy and Satisfaction with the Shopping Experience

Satisfaction with the consumer's shopping experience is a central factor in the success of an online business. In online business, the convenience of being able to access from anywhere and/or any device, the possibility of comparing not only products but also prices, and the sensitivity of the site to the consumer are all factors of vital importance for consumer satisfaction [83], which indicates that e-commerce platforms must prioritize the consumer experience and, consequently, satisfaction with the consumer's shopping experience.

The results of the study indicate that consumer satisfaction with the online experience is positively influenced by consumer trust. In addition, the  $\beta$  and  $p$  values for the relationship between the returns policy and satisfaction with the consumer experience show that a well-defined product returns policy has a positive influence on consumer satisfaction.

These results support the conclusion of Demirel [84], who states that consumer satisfaction with the online experience is positively influenced by consumer trust and adds that consumer trust is also positively influenced by a well-defined product return policy.

On the other hand, the positive influence of a product return policy contradicts the conclusion of Lantz and Hjort [51], who argue that a return policy, from a management point of view, is not an economically advantageous measure. However, the same authors also state that if any company decided to stop having a returns policy, this would be detrimental to the company itself, because it would be perceived by the consumer as negative. This last observation is in line with the results of this study, which conclude that having a clear returns policy is important.

### 5.3. The Perception of Risk in Satisfaction with the Shopping Experience

The existing literature on the influence of perceived risk on satisfaction with the shopping experience is that the lower the perceived risk, the greater the satisfaction for the consumer and their shopping experience. Mortimer et al. [70] state that when the perceived risk is low, the consumer will be satisfied and will develop positive purchasing behaviors, something that is supported by the conclusions of the study by Miao et al. [71]. Tandon et al. [85] show that perceived risk and satisfaction with the shopping experience have a negative linear relationship. Moreover, the identification of a quadratic relationship between perceived risk and satisfaction with the shopping experience constitute the most interesting and novel contribution. This finding challenges the prevailing notion that minimizing perceived risk always leads to greater satisfaction. Instead, our results suggest that an optimal level of perceived risk exists, where a moderate degree of risk can enhance the shopping experience and contribute to greater satisfaction.

The results obtained in this study challenge these conclusions. This study shows that the relationship between perceived risk and satisfaction with the shopping experience is not just a linear relationship, but that there is a quadratic relationship between these two variables (U-shaped), where there is an optimum point of perceived risk that positively affects satisfaction with the customer's shopping experience. This relationship between perceived risk and satisfaction with the consumer's shopping experience shows that a very low perception of risk results in dissatisfaction with the consumer's shopping experience. As the perceived risk increases, satisfaction with the shopping experience also increases, until an optimum perceived risk value is reached, from which point satisfaction with the shopping experience begins to decline. Thus, too low or too high a perceived risk results in dissatisfaction with the consumer's shopping experience, and maximum satisfaction with the consumer's shopping experience is achieved with a certain degree of perceived risk in online shopping. This result opposes the results presented by Tandon et al. [85] and Shu-Hao et al. [86], who state that the central objective of companies should be to reduce the perceived risk of online shopping for the customer, so that trust on the website and

the company leads to satisfaction with the shopping experience. According to this study, companies should seek to find the optimum value of perceived risk of online shopping that allows them to maximize satisfaction with the shopping experience.

The unexpected findings related to the relationship between return policies, free returns, and risk perception highlight the evolving dynamics of consumer behavior in e-commerce. While the prior literature suggests that lenient return policies and free returns reduce perceived risk [8,10], our results indicate that these factors do not significantly influence risk perception or satisfaction. This divergence may stem from the increasing normalization of return policies in online retail, making them less of a differentiating factor in shaping consumer perceptions of risk. Moreover, the quadratic relationship between risk perception and satisfaction suggests that consumers do not necessarily seek to minimize risk entirely but rather appreciate a certain level of perceived risk that enhances engagement with the shopping experience. This insight aligns with research highlighting that an optimal balance of risk can lead to higher satisfaction [70].

The relationship between return policies, consumer risk perception, and e-satisfaction reflects a critical dimension of online consumer behavior. Return policies, whether lenient or restrictive, serve as a mechanism to manage consumer uncertainty, yet their psychological impact on risk perception remains complex. While prior research indicates that flexible return policies reduce perceived risk [10], our findings challenge this assumption by demonstrating that neither return policies nor free returns significantly alter risk perception. This suggests that modern consumers, accustomed to return policies as a standard feature of online shopping, may no longer interpret them as a risk-mitigation tool. Instead, our results imply that consumers engage in risk-taking behaviors, such as impulse purchases [47], with the implicit expectation of returning unwanted products, shifting the role of return policies from risk reduction to behavioral enabler.

## 6. Conclusions

### 6.1. Theoretical Implications

An SEM conceptual model was used to achieve the proposed objectives. The first objective was to understand how the perception of risk was affected by the consumer's online purchasing confidence. The results show that consumer trust influences the perception of risk because the greater the trust, the lower the perceived risk of buyers and, therefore, that it is important for retailers to focus on transmitting trust, as this emerges as a mitigating factor of perceived risk.

The second objective was to understand how consumer trust online and the provision of a clear and easy returns policy affected satisfaction with the shopping experience. The results show that these two variables are important and have a positive relationship with consumer satisfaction with the purchase. A relevant recommendation is that the existence of a well-defined returns policy is important for consumer purchasing satisfaction and should be a factor to consider in the structure of the B2C online purchasing process.

The third objective was to understand how the perception of risk could influence satisfaction with the shopping experience and the results point to something different from what has previously existed in the scientific literature, where it is clear that it is valuable to have a certain amount of risk associated with online shopping and that there is an optimum point at which risk can and should be taken in online shopping because this risk contributes to the satisfaction of online shopping for the consumer. The relationship established between these two variables is a U-shaped relationship, where a purchase without risk does not bring satisfaction and a purchase with too much risk also does not bring satisfaction to the consumer.

This work reinforces the negative linear relationship between consumer trust and risk perception, which has already been studied by other authors [87]. With regard to satisfaction with the online shopping experience, this work is in line with the findings in the literature that consumer trust is a factor that positively influences satisfaction with the shopping experience [88]. In addition, this work argues that the existence of a well-defined return policy is important for satisfaction with the shopping experience. Finally, the main result of this work is the introduction of a quadratic relationship between perceived risk and satisfaction with the shopping experience. This relationship implies that there is an optimal value of perceived risk for which satisfaction with the shopping experience is maximum. This result is innovative in the sense that it presents a new quadratic relationship for these two variables, as an alternative to the negative linear relationship previously found in the literature.

Since the perception of risk is a central aspect of consumer behavior, risk is often perceived as being painful because, according to this theory, it leads to the production of anxiety, something that must be resolved in some way by the consumer. What this study adds is that the existence of a certain degree of risk in a B2C online purchase is positive on an economic level and that this anxiety can be an important factor in consumer behavior when buying online.

#### *6.2. Practical Implications*

This study offers several practical implications for online retailers. First, the findings reinforce the importance of trust in online shopping. Retailers should prioritize building and maintaining consumer trust by implementing security measures, providing clear and accurate product information, offering excellent customer service, and ensuring transparent and fair business practices.

Second, while attractiveness of free returns did not directly impact satisfaction in this study, having a clear and easy return policy positively influenced consumer satisfaction. Retailers should focus on creating hassle-free return experiences that foster trust and confidence in their brand.

Furthermore, the study highlights the importance of understanding the nuanced role of risk in online shopping. The finding that an optimal level of perceived risk exists challenges the traditional focus on minimizing risk. Retailers could explore strategies to create a sense of excitement and adventure in the online shopping journey, perhaps through limited-time offers, exclusive deals, or personalized recommendations that introduce an element of surprise and discovery.

#### *6.3. Limitations and Future Research*

This study contains limitations that could be explored in future research. Firstly, the cross-sectional nature of the study limits the ability to definitively establish causality. Future research should include longitudinal studies that follow consumers over time, something that may offer deeper insights into how risk perception and satisfaction evolve with accumulated experience [89]. Secondly, this study uses a non-probability convenience sampling procedure for the survey, which can create representativeness problems for the population under study. Thirdly, this study was only carried out in Portugal, and it would be interesting to explore how cultural differences influence risk perception and consumer satisfaction. Different cultures have different risk tolerances, which can affect their expectations and shopping experiences [83]. Therefore, some caution is needed when generalizing the results. Consequently, to achieve better generalization, future research should test the conceptual model using data from other cultures and/or countries and use a probability sampling procedure.

Two interesting future topics that can be explored are how emerging technologies, such as blockchain and artificial intelligence, can affect consumers' perception of risk and trust, as these technologies have enormous potential to revolutionize security and transparency in transactions [90]. Another relevant topic would be the incorporation of more complex psychological models to help understand the cognitive and emotional processes underlying risk perception, an activity that can undoubtedly help identify more effective interventions to increase consumer satisfaction [91].

**Author Contributions:** Conceptualization, Á.D. and F.H.; methodology, Á.D.; software, Á.D.; validation, F.H. and L.P.; formal analysis, F.H.; investigation, F.H.; resources, L.P.; data curation, F.H.; writing—original draft preparation, F.H.; writing—review and editing, L.P. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** This study did not require formal ethical review and approval because participants provided written informed consent prior to the in-depth interviews. The survey, distributed online through social media channels, ensured anonymity by preventing direct contact between researchers and participants. No identifying information was included in the interview script or questionnaire. The researchers only had access to anonymized data without names, addresses, or birth dates, ensuring participant privacy.

**Data Availability Statement:** Data will be provided upon reasonable request.

**Conflicts of Interest:** The authors declare no conflicts of interest.

## Appendix A

### Survey Items

#### Online Trust

Saoula et al. [41]

1. I felt secure in my transaction when I made the purchase online.
2. I believe that the online seller can protect my identity.
3. I chose an online seller that I believe is honest.
4. I felt that the online seller gave me a good service.

#### Attractiveness of free return

Urvashi et al. [73]

1. A free returns policy influences me to shop online more often.
2. I prefer to buy from sellers who mention that they have a free returns policy.
3. A free returns policy reduces my risk of receiving a faulty product.
4. A free returns policy motivates me to buy more.
5. A free returns policy makes me feel comfortable while shopping online.

#### Return policy

Urvashi et al. [73]

1. The online seller's return policy was listed on their website.
2. The online seller suggests a reasonable amount to pay for the return.
3. The online seller promises an easy way to return the item.

#### Perceived risk

Han and Li [74]

1. I was afraid to buy online because I paid for the item (s) straight away and I wasn't sure if they would arrive.
2. I was afraid that the online seller would jeopardise my privacy by using personal information without my permission.
3. I was concerned about the quality of the product (s) when buying online.
4. I was worried that the product (s) would be different from what I was expecting.

## Satisfaction

Sharma and Aggarwal [75]

1. I was satisfied with the online seller's website.
2. I will recommend the site to my friends and relatives.
3. I will buy from the site again.

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