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Perceived risk and online purchase intention of selected public school teachers: A study in Calapan City, Oriental Mindoro, Philippines

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Abstract

Consumers' perceived risk has been considered a fundamental concern of the decision-making process when shopping online. This study aims to examine the level of online shoppers' intention towards online purchases as affected by perceived risks. The study used descriptive-correlational design to describe the extent of perceived risks in terms of product, financial, security, social, and time risk and the level of purchase intention of the participants. A total of 198 selected public school teachers in Calapan City were selected to ask participation in the survey to assess their five types of risk perceptions and online purchase intentions. Data were collected with the aid of online survey instruments. Results indicated a significant relationship between the extent of the perceived risks by the selected public school teachers in Calapan City in terms of product, financial, security, social, and time risk and the level of their purchase intention. Moreover, the result of the study shows that despite the risks they perceive in online shopping, they are still interested in online shopping, use it frequently, and consider shopping online more than shopping at physical stores.

Keywords: Product risk; Perceived risk; Financial risk; Online shopping; Security risk; Purchase intention; Social risk; Perceptions; Time risk

1. Introduction

The Internet has grown into a massive worldwide marketplace for exchanging goods and services during the last few decades [1]. The Internet has changed how consumers buy goods and services worldwide. In the past, customers would physically go to a traditional retail store, look for the item they needed, compare it to other things there, ask the sellers for recommendations, and finally pay for it at the counter. However, this situation has significantly shifted with the global spread of "online shopping" [2].

Additionally, many businesses have started using the Internet to sell their goods because it enables them to lower marketing expenses and, as a result, lower the cost of the goods being sold. This has spread throughout the world and helps the company maintain an advantage over rivals in highly competitive areas [2]. Even though internet commerce has experienced enormous development and the future looks good, it is also increasingly being linked to negative aspects. With how online shopping has become a popular way of shopping for consumers nowadays in making shopping much easier, potential risks arise [3].

As time passes, a new era of commerce, creativity, and innovations—primarily in marketing—is beginning. Everyone in every industry believes that certain efforts, novel approaches, or emerging trends have a significant financial impact on a firm, which is the primary goal of the newly founded business. The standards of communication between marketers

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and customers have evolved since the advent of the Internet in industry. People know who and where to contact if they are unhappy with the goods or services they had been promised.

They also worry about delivery loss or the possibility of having their items damaged, delivered late, or sent to the wrong location or consumer. They also express worries about losing control over their personal information or being misused, as was the case with Facebook and Cambridge Analytics. Therefore, considering that perceived risk is an essential predictor of online transactions, there is still room for discussion regarding how perceived risk affects customer behavior [4].

The research has an active discussion regarding the risk factors influencing online transactions [4]. Prior research on the connection between perceived risk and purchase intent has focused on its effects on purchasing behavior [5], attitudes toward online shopping [6], continuation intentions [7], a mediating role in perceived value [8], and willingness to pay [9]. Traditional shopping is done for reasons that are neither hedonistic nor pragmatic. Hedonists are those who like shopping for fun and amusement, whereas utilitarians are those who are more practical or goal oriented. The core of marketing is to encourage consumers and potential customers to purchase and promote positive word of mouth regarding a specific commodity or service. The same principles apply to internet marketing, but because there are now more informational websites on Google, it is more challenging for businesses to lure customers in. Unlike in the past, customers only knew specifics about a good or service. Consumers today often act differently and wisely [10].

New channels of communication between suppliers and customers have emerged due to the expansion and universality of the Internet and online applications. Internet-based purchasing has replaced traditional retail with online and, later mobile buying. Customers' lives and experiences have been transformed by mobile commerce, often known as M-Commerce [11].

Online shopping is a form of electronic commerce where customers purchase products or services from sellers directly over the Internet. An online store is often referred to as an e-shop, e-store, website, webshop, Internet shop, or virtual store. The idea of internet buying has evolved. It has shown itself through many e-commerce platforms/sites that have been rising since the late 2000s, ranging from Amazon, Carousell, eBay, Shopee, Lazada, Zalora, and Facebook Market. The main factor influencing consumer decision to buy desired things online is ease. Online stores are operational 24/7, and comparing products offered by numerous sellers worldwide is easier. Online shoppers do not encounter problems like store location and product availability, in contrast to traditional shoppers [12].

The Gen Z and millennial age groups, which also make up most of the country's internet users, make up the majority of Filipino online buyers. More than 50% of internet purchases were made by people 25 to 34, who also comprise the working group with the most significant average income. According to the article "Weekly online shopping activities of internet users Philippines Q3 2021," 62.5 percent of respondents in the Philippines reported making an online purchase during the third quarter of 2021. Others made internet grocery purchases. Online shoppers from the Philippines are using e-commerce sites to make retail purchases. More than 73 million Filipinos are registered internet users, and 99% of them are active on social media, according to a published study. The average Filipino uses the Internet for an astounding nine hours and 45 minutes daily, of which three hours and 53 minutes are spent on social media [13].

Given these concerns, the researchers studied the perceived risk of consumers' online purchase intention of selected public school teachers in Calapan City. The interest awakened the researchers as to why people suddenly patronize buying online this time during the pandemic. Also, marketing management students thought of this study to contribute to the professionals, investors, and entrepreneurs engaged in this kind of business.

This study is limited to knowing the relationship between the perceived risks and the level of online purchase intention of selected public school teachers in Calapan City, focusing on the variables presented in the conceptual framework.

2. Literature Review and Hypothesis Development

2.1 Online Purchase Intention

The desire to buy anything is crucial when shopping. Companies exist because customers buy their products. The likelihood of making a purchase can be affected by several factors, including satisfaction, usefulness, trust, and risk. Overall satisfaction and attitude are something that influences the intention to purchase. Customers are more likely to make a purchase and then make another when they have a good experience with the online store and are satisfied. Not only is satisfaction important during the purchase, but it is also essential for the post-purchase phase for repeat purchase intention [14]. Another factor that has a negative impact on buying intention is risk. The impact, though, can

change depending on how frequently a person spends online. Risk will not affect a consumer's decision to buy as much when they are a frequent online shopper as opposed to a light shopper [15]. For purchasing intention, trust is a relationship that can be mitigated. A consumer is more likely to make a purchase when they feel that they can trust the website, either as a result of appealing visuals or a wealth of information.

Online shopping, followed by internet browsing and email, is the most significant or necessary of all online activities [16]. It is defined as a customer's readiness to purchase goods online [17]. When people say they intend to buy anything online, they want to do it from any online retailer. Online purchase intention refers to a customer's readiness to use the Internet to purchase or compare product prices [18]. Customers' purchase intentions are crucial for determining consumer behavior because they are influenced by various factors, making measurement complex in various circumstances [19]. More than strong privacy and security standards are needed to increase online transaction likelihood [20]. It was more crucial for customers to believe that the company could satisfy their needs and wants than for them to believe that goodwill would affect their purchase decision.

Buying intention can be used to evaluate natural customer purchasing behavior. Previous studies [19] have shown that customers' perceptions of risk harm their intentions to purchase clothing online. The greater the perceived risk, the less probable customers will make a purchase. In a Jordanian study, the influence of six perceived risks—financial, time, information security, product, and delivery—on the intention to make an online purchase was examined using a sample of about 395 online customers. The results show that online purchase intentions are negatively impacted by product, financial, delivery, and information security risks [21]. Due to the new internet marketplace, significant modifications are needed to increase or retain client trust. People must believe that shopping online is superior to going to an actual store [20]. The conclusions indicate that firms need to be aware of these risks and strategies for addressing them. Less perceived risk will enhance consumers' online shopping experiences and boost their online purchase likelihood.

2.2 Perceived Risk

It is a chance that a consumer's purchase will have a negative result as well as the potential that they will be unhappy with the product as compared to its intended use [22]. A measurement of unanticipated discontent and disappointment with purchasing decisions based on the purchase aim is known as perceived risk. Because customers are more likely to pursue completion than to avoid potential failures, it is a good predictor of consumer behavior [11]. Customers believe online buying risks unfavorable outcomes or circumstances [24]. Buyers are uncomfortable with online shopping since bad things could happen [25].

Furthermore, perceived risk can be defined as the expectation of consumers to suffer a loss. This can be defined as the number of perceived risks consumers are willing to accept to make a purchase decision [22]. As a result, the perceived risk in this study concludes that consumers are concerned about the possibility of poor results or situations occurring during online shopping activities [24].

Consumers generally have few opportunities to physically inspect things in the internet environment, which increases information asymmetry and heightens consumer anxiety [26]. Consumers are uneasy about potential deceit because of the few interactions they have with service providers and because it is challenging to return defective goods in an online environment. As a result, the perceived risk of online transactions decreases perceived behavioral and environmental control, which negatively impacts how people use internet technology for buying. Perceived risk has six components that together account for 88.8% of the construct: performance risk, physical danger, financial risk, psychological risk, social risk, and temporal risk [27].

2.3 Product Risk

Product risk is the chance of getting the wrong product or something different from what was advertised on the internet [28]. Due to consumers' inability to inspect products physically, product risk is increasingly common in online shopping. Prior to buying, consider the product's quality. To touch, feel, and use the product or service while shopping online is unrealistic. Although online retailers frequently provide information and use cutting-edge technologies to reduce the perception of product risk, such as web rooming, zooming features, and online reviews. The information may not always be sufficient, and there may still be instances of product mismatch. When a product's warranty, reviews, return policy, and after-sales support are prominently shown on an online retailer's website, the risk of that product may also be minimized [6]. Previous research revealed that product risk negatively impacts customers' attitudes regarding online activity and purchases [6]. Product risk harmed online purchase intentions for digital goods but not non-digital goods [29]. It is discovered that high and low-engagement items harmed purchase intention. In light of this, they suggest that product risk will adversely affect Gen Y and Z consumers' online purchase intentions [28].

Mental attitudes considerably impact perceived satisfaction and purchasing intent. The results of this study showed that protection and confidentiality had the most significant effects on perceived risk and cognitive trust, respectively. How a product is described and presented dramatically impacts how well a customer can understand it, which leads to product risk. The inability to inspect the product and a lackluster product information display may increase consumer anxiety [30]. Online consumers believe that there is a high likelihood that the products will be in poor condition after purchase and that this does not lead to consumer satisfaction, even if the function of the products is not an expectation [10].

Moreover, value product performance risk based on product quality, function, difficulties, and the degree of happiness online customers attain based on the product's functionality [15]. This could explain why consumers who shop online steer clear of product performance hazards since they risk not meeting their expectations [10]. Many online customers are dissatisfied when a product does not live up to their expectations. Consumers cannot touch, see, or test products for various reasons [24]. Online retailers provide less product information, illustrated in online store web page results, and online consumers consider product performance risk before making a purchase.

2.4 Financial Risk

The safety and security of using credit cards online and divulging personal information may worry consumers. Even if they place an order online, customers prefer alternate payment options, including cash on delivery, online/offline banking transfer, and third-party protected payment methods like PayPal to credit cards. According to prior research, one of the most frequent worries while shopping online is the danger of credit card fraud [12]. Online shoppers must weigh a substantial financial risk while determining whether to go through with the transaction. This is because financial risks have become a danger, creating unfavorable impressions and affecting consumer behavior [31]. Online shoppers attempt to minimize the financial risk of financial loss brought on by unfavorable circumstances and poor judgments regarding particular goods or services. They defined financial risk as the possibility of consumers suffering financial loss due to the things they bought [32].

Online shoppers are aware of financial losses associated with online shopping, particularly credit card issues. Financial losses include extra money charges for the delivery process, as well as financial transactions, which have become the primary concern when doing online shopping [15]. Malaysian online shoppers are primarily concerned with avoiding financial loss due to a lack of trust in security systems for credit card information disclosure. As a result, in addition to credit card payments, online consumers prefer other payment methods such as cash on delivery (COD), online banking, PayPal, FPX transfer, and others [24]. Whether or not a person decides to make a purchase when shopping online is heavily influenced by their financial situation. This is due to the threat presented by financial risk, which sparked unfavorable perceptions and changed consumer behavior [31]. They assumed that the first stage of online shopping—immediately following the customer's online order—often involves financial risk.

2.5 Security Risk

There are numerous opportunities for consumers to risk losing money in an e-commerce setting. Security risk is one area of risk that is quite concerning. Security risk is about the potential for compromised online users' personal data. Shoppers are often concerned about uncertainty, which affects an online retailer's future profit. It has been shown that one of Internet users' top worries is the protection of their financial and personal information. This issue becomes more of a problem when a population has only recently started accessing e-commerce [10].

Customers evaluate the worth of goods based on information provided by websites. Quality, customer service quality, and delivery capability are all factors to consider [19]. The term "security risk" refers to the possibility of financial loss due to online fraud or hacking, which exposes online users' personal information [33]. The term "security risk" refers to disclosing an online user's account number, credit or debit card number, or Pincode. Thus, while an online platform makes purchasing straightforward, the lack of a security mechanism harms a customer's desire to buy something online [17]. Customers are hesitant to provide credit card numbers or shipping information in online purchases because they do not believe the platform is secure [21]. However, more information is required when customers shop for apparel online [29]. Security risk harms online apparel purchases. People who are unsure about a website are more likely to provide false or incomplete information rather than accurate information [19].

2.6 Social Risk

Social risk is the likelihood that customers would worry about losing friends and respect from social groups due to their online shopping habits [10]. Online buyers avoid social risk due to poor product and service quality, financial transaction fraud, and poor decision-making due to blame from friends and family [24]. The perception of social risk

among members of social groups determines whether it is positive or negative [10]. Delivery, security and privacy, and after-sale risk are a few examples of perceived internet risks that prior justifications have suggested. As a result, this study proposes seven s-commerce risk dimensions based on literature in addition to the traditional trading risks.[35].

People in Pakistan are worried about other people's opinions because of their collectivist culture. Regarding their activities and acts, they are concerned about how their friends, family, and coworkers will react to them [36]. By selecting an incorrect product from an inappropriate source, buyers risk losing status among their family and friends and experiencing social risk [37]. In addition, there is a societal risk of diminished consumer confidence and self-esteem [38]. Additionally, in a social group, a family member might significantly impact another family member's online buying behavior. Typically, buddies are crucial to one's shopping habits. Social risk has a negative impact on online shopping behavior, and consumers steer clear of it [39]. Additionally, numerous research demonstrates a strong connection between social risk and internet shopping habits [40]. Furthermore, some studies indicate a negligible connection between social risk and online shopping habits [21]. As a result, it is necessary to incorporate another variable, culture, as a moderator between social risk and online buying behavior.

2.7 Time Risk

Customers avoid time-consuming tasks as they have less time, especially when they shop online. Consumers who conduct business online may encounter time risks, frequently encountered by difficulty navigating, difficulty placing purchases, and delays in receiving products [38]. Additionally, it has to do with the hassles customer experiences when trying to locate a website, using that website, checking out quickly, and waiting a long time to receive their product [41]. Online transactions are unsuccessful when there are delivery issues, sluggish internet connections, difficulty navigating websites, and prolonged information searches [42].

When things do not live up to customers' expectations, and they have to send them back for a replacement, that is another instance of time risk [5]. As a result, perceived complexity and inconvenience in online shopping will harm customer intent. Time risk also includes scenarios where customers are forced to exchange a product because it fell short of their expectations [5]. As a result, customers' intentions will be harmed by the perception of online shopping's complexity and discomfort.

Consumers are concerned about the time spent online purchasing [15]. Time risk is the likelihood that consumers will feel that time has been wasted due to poor product or service quality [10]. Time risk, on the other hand, is defined as the likelihood that consumers will feel that time has been wasted as a result of a poor purchase decision, where time includes information search, shopping, and product return [43]. Consumers perceive the time spent waiting for online retailers to complete the delivery process and returning the defective product as a waste of time [24]. This is in line with a review by [25], who stated that consumers might perceive that purchasing and receiving products via the internet takes a long time. Because consumers lack experience with online shopping activities such as online financial payment, product search, order placement, and submission, they perceive time as waste and find it difficult to shop online [25]. Furthermore, internet download speed and website design could influence the time online shoppers spend shopping. This is because websites with high graphics take a long time to load and wait for online customers, causing them to become frustrated [32].

2.8 Theoretical Framework

2.8.1 Theory of Planned Behavior

The assumption is that people behave rationally following their views, subjective norms, and perceived behavioral controls. These elements form the background of the decision-making process, even though they are not always considered positively or consciously. The motivating variables that drive action are thought to be captured by intentions, indicating how much effort a person is prepared to put forth to carry out the behavior. Generally, an activity should be more likely to be performed the more substantial the intention to engage in it [44].

The TPB is one of the most used consumer behavior models in the literature and has been widely applied to the theoretical framework in the context of online purchasing behavior.

This theory appears appropriate for explaining the purchase intentions towards online consumption. This will benefit the researchers to strengthen the claims on how the consumers purchase the product.

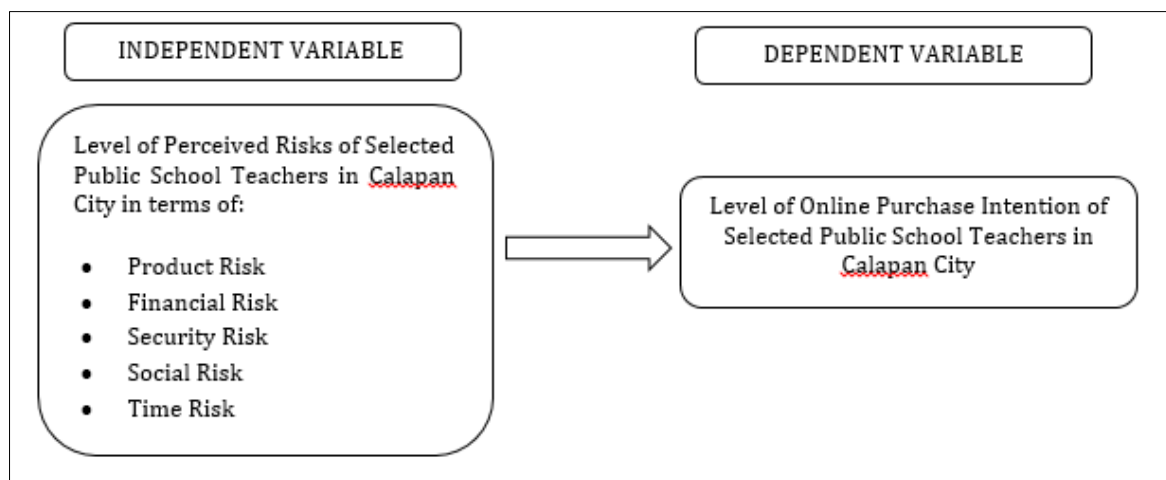
2.8.2 The Technology Acceptance Model

Technology Acceptance Model (TAM) is the theoretical basis for explaining and predicting the individual acceptance of information technology. TAM is based on the Theory of Reasoned Action (TRA), suggesting that social behavior is motivated by attitudes and intentions of action. According to TRA, individuals often act as intended within the available circumstances and time. Introduced by TAM, it employs TRA causality to explain how external variables affect a user's internal beliefs, attitudes, behavioral intentions, and actual use of technology. In addition to leveraging personal considerations and perceptions associated with specific behaviors, TAM employs two other perceptions: perceived usefulness and perceived ease of use. Recognizing its usefulness means that users find it advantageous to use technology to get their work done. Perceived ease of use is how the user perceives the ease of use of the technology [45].

This theory shows how the consumer affects their purchase intention. This study determines the attitudes and intentions of action to perform purchase intentions.

3. Conceptual Framework

The conceptual framework of this study is based on the study of *Iqbal1 (2019)* entitled “*Impact of Perceived Risk On Customer’s Online Purchase Intention Towards Branded Apparels*”. The level of perceived risks of selected public school teachers in Calapan City in terms of product, financial and security, social, time risk acts as the independent variable. While the level of purchase intentions of selected public school teachers in Calapan City is the dependent variable. The model identifies the unique contribution of each type of perceived risk to consumers’ online purchase intention.



Source: impact of perceived risk on customer’s online purchase intention towards branded apparels (iqbal1, 2019)

Figure 1 Conceptual Framework

3.1 Statement of the Problem

This quantitative study aims to determine the status of perceived risk on online purchase intention of selected public school teachers in Calapan City.

Specifically, it aims to answer the following questions:

- What is the level of perceived risk of selected public school teachers in Calapan City in terms of:
 - Product Risk
 - Financial Risk
 - Security Risk
 - Social Risk
 - Time Risk
- What is the level of online purchase intention of selected public school teachers in Calapan City?
- Is there a significant relationship between the perceived risks and the level of online purchase intention of selected public school teachers in Calapan City in terms of product, financial, security, social, time risk?

3.2 Hypothesis

- H1: There is a significant relationship between the perceived risks and the level of online purchase intention of selected public school teachers in Calapan City.
- H2: There is no significant relationship between the perceived risks and the level of online purchase intention of selected public school teachers in Calapan City.

4. Material and methods

4.1 Research Design

To test hypotheses or predictions using statistics and generalize results to a broader population, the researchers choose quantitative research to collect and analyze numerical data. In order to satisfy the objectives of the study, researchers choose the descriptive-correlational research design. A descriptive-correlational study uses a research strategy that describes and forecasts how variables relate naturally in the real world without attempting to alter those relationships or assign causation. This design is the best way to examine the strength or relationship between variables. In this study, relevant results are expected to evaluate and analyze the extent of perceived risks and the level of online purchase intention of selected public school teachers in Calapan City that contribute to determining the relationship between the variables to achieve the desired improvement in the research study.

4.2 Respondents of the Study

The study population consists of selected public school teachers in Calapan City, totaling 406 teachers. The proponents used the Raosoft calculator with a 5% margin of error and 95% confidence level to get the recommended sample size of 198 respondents. Employees have been deemed an appropriate target for sampling because they have monthly income, active online shoppers, and frequent buyers of the products used in the study. The researchers will use random sampling to accommodate the specific sample size.

4.3 Data Gathering Procedures and Instrumentation

Researchers created a self-made questionnaire using online surveys as their primary data collection tool. The data was collected using an online survey form via Google Forms to minimize contact with respondents. It is used to determine the level of the perceived risk of respondents related to the product, financial, security, social, and time risks when shopping online and their intent to buy online. The respondents selected public school teachers in Calapan City. It was used to determine respondents' influence on perceived risk on consumers' purchase intention.

Following the research model, the research instrument comprised two parts; the first part of the questionnaire contained the extent of perceived risk on consumers. Part 2 of the questionnaire will focus on the online purchase intentions of selected public school teachers in Calapan City. All responses will be obtained in a five-point Likert scale where "5" stands for "strongly agree," "4" for "agree," "3" for "neutral," "2" for "disagree," and "1" for "strongly disagree."

4.4 Reliability

The self-made questionnaire went through a reliability test and was initially answered by fifteen persons. The questionnaire was tested using Pearson's R method.

Table 1 Result of Correlation Analysis

Product Risk		Pearson	Description
1.	I get an item that meet the product/performance requirements as expected	0.87	RELIABLE
2.	I receive an item that is not expired or defected	1.00	RELIABLE
3.	I get what I ordered through online shopping	0.94	RELIABLE
4.	I receive an exact item from what I ordered	0.91	RELIABLE
5.	It is easy to judge or examine the quality of product over Internet	0.96	RELIABLE
Financial Risk		Pearson	Description

1.	I do not suffer a monetary loss due to non-delivery of order	1.00	RELIABLE
2.	I was able to ask for refund for the unuseful or wrong item I received	0.89	RELIABLE
3.	I got the price indicated in comparison with the quality	1.00	RELIABLE
4.	I do not get overcharged upon delivery	0.93	RELIABLE
5.	I do not face difficulty in settling payment and might encounter error	1.00	RELIABLE
Security Risk		Pearson	Description
1.	Seller guarantee the security of my privacy information	0.96	RELIABLE
2.	My personal information is secured on the internet	0.97	RELIABLE
3.	Social media is a safe place for online shopping	0.97	RELIABLE
4.	My card account or online wallet that connected to an online shopping app or website were surely secured.	0.97	RELIABLE
5.	My home address is secured	0.96	RELIABLE
Social Risk		Pearson	Description
1.	If I purchase online, my family and friends will admire me	1.00	RELIABLE
2.	Product purchased online was accepted by my friends and family	1.00	RELIABLE
3.	I do not get blamed by my friends and family when I refer a product that bought online is defective.	1.00	RELIABLE
4.	My family and friends like my recommendation if I recommend the product I bought online.	0.91	RELIABLE
5.	I do not harm my family and friends when I recommend a health product	1.00	RELIABLE
Time Risk		Pearson	Description
1.	Communicating with the seller in social media do not take time	0.96	RELIABLE
2.	I do not spend lots of time searching for product online	0.97	RELIABLE
3.	I do not waste my time shopping online	0.95	RELIABLE
4.	I do not face long delivery due to the seller's poor service	1.00	RELIABLE
5.	I do not face a waste of time when the app, website, online wallet and online banking is unavailable due to their technical problems and maintenance.	1.00	RELIABLE
Online Purchase Intention		Pearson	Description
1.	I am interested in online shopping	0.85	RELIABLE
2.	I will consider online shopping	1.00	RELIABLE
3.	I will use online shopping	1.00	RELIABLE
4.	I will frequently do online shopping	0.87	RELIABLE
5.	I will shop online more than I will shop at physical stores	0.93	RELIABLE

4.5 Data Analysis

Descriptive statistical tools such as weighted mean will be used to quantify respondents' responses to the two study variables. Meanwhile, an inferential statistical tool such as Pearson's correlation was used to determine the significant relationship between the extent of the perceived risks and the level of the purchase intention of selected public school teachers in Calapan City.

4.6 Ethical Considerations

The researchers asked permission from respondents to avoid deception. Respondents have the right to know the purpose of the survey before participating. Therefore, the first page of the Google Forms survey informs respondents about the ratings conducted, the purpose of the study, the method of the results used, and the identity of the supporters. Respondents participated based on informed consent. Respondents are also informed and warranted that their data will only serve as the primary dataset for this study and will only be used for academic purposes. Proponents act responsibly to protect the data collected and prevent privacy threats because it complies with the Data Protection Act 2012. In addition, potential respondents have the right to participate or opt-out of the study without adverse effects.

5. Results and discussion

5.1 Status of the perceived risk of selected public school teachers in Calapan City in terms of

5.1.1 Product Risk

Table 2 Mean Perception of the Respondents in Terms of Product Risk

	Product Risk	Mean	Rank	Interpretation
1.	get an item that meet the product/performance requirements as expected	4.39	1	AGREE
2.	I receive an item that is not expired or defected	4.33	2	AGREE
3.	I get what I ordered through online shopping	4.29	4	AGREE
4.	I receive an exact item from what I ordered	4.31	3	AGREE
5.	It is easy to judge or examine the quality of product over Internet	3.94	5	AGREE
	WEIGHTED MEAN	4.25		AGREE

Legend: 4.50 – 5.00 – Strongly Agree (SA); 3.50 – 4.49 – Agree (A); 2.50 – 3.49 – Neutral (N); 1.50 – 2.49 – Disagree (D); 1.00 – 1.49 – Strongly Disagree (SD)

Table 2 presents the respondents' mean perception of the perceived risks of selected public school teachers in Calapan City regarding product risk.

The highest rank mean of 4.39, described as agreed, was obtained on the indicator "I get an item that meets the product/performance requirements as expected." This result indicates that the shoppers receive a product that fulfills the required product and performance specifications.

On the other hand, item number 5 states that it is not easy to judge or examine the quality of the product over the internet, ranked the lowest as attested by the mean value of 3.94 described as agreed. It shows that the shoppers are struggling to assess the quality of the product, agreeing that it is difficult to assess product quality through the internet.

Meanwhile, the remaining item, numbers 2, 3, and 4, state about receiving a product that is not expired or defective. Getting the product that they ordered online and receiving the exact item ordered, the shoppers all rated agreed with the respondents as confirmed by the following obtained mean values of 4.33, 4.29, and 4.31, respectively. This reveals that the risks that are being unconcerned and expected by respondents are receiving the right product most of the time.

The overall mean of 4.25 revealed that the shoppers agreed that the risks they perceived were related to product risk. The overall result shows that the shoppers received an item that does fulfill the expected product or performance requirements. It is also possible that they would get a useless product. It could be expired or defective. They might also get the product they got through online purchasing, get the right item or what they expected. More so, the results show that it is simple for shoppers to assess or check the quality of the product through the internet.

Online consumers believe that there is a high likelihood that the products will be in poor condition after purchase and that this does not lead to consumer satisfaction, even if the function of the products is not an expectation [10]. However, according to the result above, online shoppers opposed that they do not face product risk. It shows that online shoppers are aware of the risks they may face but still purchase and receive the right product they purchased online.

5.2 Financial Risk

Table 3 Mean Perception of the Respondents in Terms of Financial Risk

	Financial Risk	Mean	Rank	Interpretation
1.	I do not suffer a monetary loss due to non-delivery of order	3.98	5	AGREE
2.	I was able to ask for refund for the unuseful or wrong item I received	4.08	4	AGREE
3.	I got the price indicated in comparison with the quality	4.10	3	AGREE
4.	I do not get overcharged upon delivery	4.18	2	AGREE
5.	I do not face difficulty in settling payment and might encounter error	4.24	1	AGREE
	Weighted mean	4.11		AGREE

Legend: 4.50 – 5.00 – Strongly Agree (SA); 3.50 – 4.49 – Agree (A); 2.50 – 3.49 – Neutral (N); 1.50 – 2.49 – Disagree (D); 1.00 – 1.49 – Strongly Disagree (SD)

Table 3 presents the respondents' mean perception of the perceived risks of selected public school teachers in Calapan City in terms of financial risk.

The highest rank means of 4.24, described as agreeing, was obtained on the indicator "I do not face difficulty in settling payment and might encounter an error." The fact that technology has been developing quickly and made online purchasing more convenient is one potential explanation for the rise in popularity of online shopping. Customers felt more liberated to use a variety of e-payment alternatives and cash on delivery, which is one of the payment methods.

On the other hand, the indicator "I do not suffer a monetary loss due to non-delivery of order" got the lowest mean of 3.98, described as agreed. A possible reason is that the product ordered online does not meet the time of delivery or the seller did not send the product. The shopper felt the monetary loss and waste of time and money.

The overall mean of 4.11 revealed that the shoppers agreed that the risks they perceived were related to financial risk. The overall result shows that the shoppers may experience a refund for the unuseful or wrong item they received. They got the right price, which is indicated by the quality of the product. They also do not get overcharged upon the delivery of the product. Additionally, shoppers do not face difficulty in settling their payments and do not encounter errors. More so, they experienced monetary loss due to sellers' poor delivery or non-delivery of the product.

Financial play an essential role for those who choose to shop online whether or not to go with the purchase. This is because financial risk raises a threat, leading to undesirable opinions and affecting consumer behavior [31]. However, the results above show that online shoppers will still purchase online even though they know the risks they may face financially.

5.3 Security Risk

Table 4 presents the respondents' mean perception of the perceived risks of selected public school teachers in Calapan City in terms of security risk.

The highest rank mean of 4.18, described as agreed, was obtained on the indicator "Seller guarantees the security of my privacy." It was followed by the items "My home address is secured," "My personal information is secured on the internet," and "Social media is a safe place for online shopping," with the mean of 4.02, 3.91, and 3.83, respectively interpreted as agreeing. The results indicate that the sellers can guarantee the shopper's security of their privacy, the home address is secured, the shoppers' personal information is secured on the internet, and social media is a safe place for online shopping.

On the other hand, the indicator "My card account or online wallet that connected to an online shopping app or website was surely secured" got the lowest mean of 2.73, described as agreed. This means that the shopper's card account or online wallet is not that secure when they use it on an online shopping app or website. This result implies that online shoppers are concerned about their card account or online wallet security.

The overall mean of 3.95 revealed that the shoppers agreed that the risks they perceived were related to security risks. The overall result shows that the seller secures the shoppers' privacy information, and the personal information is

secured on the internet. Social media is also a safe place for shoppers to shop online, and their home address is secured. Additionally, the online shopping app or website may not secure the card account or online wallet of shoppers.

Table 4 Mean Perception of the Respondents in Terms of Security Risk

	Security Risk	Mean	Rank	Interpretation
1.	Seller guarantee the security of my privacy information	4.18	1	AGREE
2.	My personal information is secured on the internet	3.91	3	AGREE
3.	Social media is a safe place for online shopping	3.83	5	AGREE
4.	My card account or online wallet that connected to an online shopping app or website were surely secured.	3.81	4	AGREE
5.	My home address is secured	4.02	2	AGREE
	WEIGHTED MEAN	3.95		AGREE

Legend: 4.50 – 5.00 – Strongly Agree (SA); 3.50 – 4.49 – Agree (A); 2.50 – 3.49 – Neutral (N); 1.50 – 2.49 – Disagree (D); 1.00 – 1.49 – Strongly Disagree (SD)

The term "security risk" refers to disclosing an online user's account number, credit or debit card number, or Pincode. Thus, while an online platform makes purchasing straightforward, the lack of a security mechanism harms a customer's desire to buy something online [17]. Although the result above shows that online shoppers are aware of the security risks, they still purchase and feel assured when they purchase online.

5.4 Social Risk

Table 5 Mean Perception of the Respondents in Terms of Social Risk

	Social Risk	Mean	Rank	Interpretation
1.	If I purchase online, my family and friends will admire me	3.75	5	AGREE
2.	Product purchased online was accepted by my friends and family	4.08	3	AGREE
3.	I do not get blamed by my friends and family when I refer a product that bought online is defective.	3.92	4	AGREE
4.	My family and friends like my recommendation if I recommend the product I bought online.	4.11	2	AGREE
5.	I do not harm my family and friends when I recommend a health product	4.15	1	AGREE
	WEIGHTED MEAN	4.00		AGREE

Legend: 4.50 – 5.00 – Strongly Agree (SA); 3.50 – 4.49 – Agree (A); 2.50 – 3.49 – Neutral (N); 1.50 – 2.49 – Disagree (D); 1.00 – 1.49 – Strongly Disagree (SD)

Table 5 presents the respondents' mean perception of the status of the perceived risks of selected public school teachers in Calapan City in terms of social risk.

The highest score of 4.15, described as agreeing, was obtained on the indicator "I do not harm my family and friends when I recommend a health product." These results indicate that recommending a product influences the consumer behavior of your family. It was followed with "My family and friends like my recommendation if I recommend the product I bought online," with a mean of 4.11 verbal interpreted as agree. My friends and family accepted the indicator "Product purchased online," which ranked third with a 4.08 mean, and "I do not get blamed by my friends and family when I refer a product that I bought online is defective," ranked fourth with a mean of 3.92. This reveals that the recommendation of a product does not harm your family and friends.

On the contrary, the indicator "If I purchase online, my family and friends will admire me "got the lowest mean of 3.75, described as agree. This result implies that online shoppers do not gain admiration in recommending a product they have purchased or bought online.

The overall mean of 4.00 revealed that the shoppers agree that the risk they perceive is related to social risk. The overall result shows that recommending a product does not affect online shoppers. Factors such as poor product and service quality, online financial transaction fraud, and poor decision-making due to blame from friends and family members cause shoppers to avoid social risk when shopping online [24]. On the other hand, the results show that online shoppers would still pursue online shopping even though they might face the social risks mentioned. This shows that online shopping would favor them regardless of the social risks.

5.5 Time Risk

Table 6 Mean Perception of the Respondents in Terms of Time Risk

	Time Risk	Mean	Rank	Interpretation
1.	Communicating with the seller in social media do not take time	3.96	3	AGREE
2.	I do not spend lots of time searching for product online	4.01	1	AGREE
3.	I do not waste my time shopping online	3.97	2	AGREE
4.	I do not face long delivery due to the seller's poor service	3.89	5	AGREE
5.	I do not face a waste of time when the app, website, online wallet and online banking is unavailable due to their technical problems and maintenance.	3.94	4	AGREE
	WEIGHTED MEAN	3.95		AGREE

Legend: 4.50 – 5.00 – Strongly Agree (SA); 3.50 – 4.49 – Agree (A); 2.50 – 3.49 – Neutral (N); 1.50 – 2.49 – Disagree (D); 1.00 – 1.49 – Strongly Disagree (SD)

Table 6 presents the respondents' mean perception of the perceived risks of selected public school teachers in Calapan City in terms of time risk.

The highest rank mean of 4.01, described as agree, was obtained on the indicator "I do not waste my time shopping online." The item followed it, "I do not waste my time shopping online." "Communicating with the seller in social media does not take time." "I do not face a waste of time when the app, website, online wallet, and online banking is unavailable due to their technical problems and maintenance." The mean of 3.97, 3.96, and 3.94, respectively interpreted as agreeing. The results indicate that online shoppers can freely use their time to purchase a product, and online platforms can be very convenient in terms of time management.

On the other hand, the indicator "I do not face long delivery due to the seller's poor service" got the lowest mean of 3.89, described as agreed. This means the shoppers experience an extended delivery time when receiving their product online. This result implies that every product purchased online does not come on time or on the same day the shoppers purchase it. The overall mean of 3.95 revealed that the shoppers agreed that the risks they perceived were related to time risks. The overall result shows that the shoppers can purchase their product online whenever they want to order it. This does not cause them to put much time into picking their product. It is also convenient for every shopper who has worked or cannot go to physical stores.

Additionally, consumers might perceive purchasing and receiving products via the internet takes a long time. Because consumers lack experience with online shopping activities such as online financial payment, product search, order placement, and submission, they perceive time as a waste and find it difficult to shop online [25]. However, the results show the opposite, online shoppers did not face time risks, and it shows that they are aware of the risks they may face.

Table 7 presents the respondents' mean perception of the level of purchase intention of selected public school teachers in Calapan City.

The highest rank mean of 4.30, described as agreeing, is obtained on the indicator "I am interested in online shopping." This result indicates that the shoppers agree that they are interested in online shopping. Online purchasing has been more popular during the past ten years. This implies that with time, online buying has gained popularity and people's attention. It was then followed with "I will consider online shopping," with a mean of 4.27 verbally interpreted as agree. Indicators "I will use online shopping" ranked third with a 4.24 mean, and "I will frequently do online shopping" ranked fourth with a mean of 4.03. This result reveals the willingness of online shoppers to engage in online shopping.

5.6 Level of purchase intention of selected public school teachers in Calapan City

Table 7 Mean Perception of the Respondents in Terms of Online Purchase Intention

	Online Purchase Intention	Mean	Rank	Interpretation
1.	I am interested in online shopping	4.30	1	AGREE
2.	I will consider online shopping	4.27	2	AGREE
3.	I will use online shopping	4.24	3	AGREE
4.	I will frequently do online shopping	4.03	4	AGREE
5.	I will shop online more than I will shop at physical stores	3.89	5	AGREE
	WEIGHTED MEAN	4.15		AGREE

Legend: 4.50 – 5.00 – Strongly Agree (SA); 3.50 – 4.49 – Agree (A); 2.50 – 3.49 – Neutral (N); 1.50 – 2.49 – Disagree (D); 1.00 – 1.49 – Strongly Disagree (SD)

On the contrary, the indicator "I will shop online more than I will shop at physical stores" got the lowest mean of 3.89, described as agree. This means that shoppers will shop online more than at physical stores. This outcome suggests that online buyers prefer to shop more online than in physical stores. However, some shoppers are hesitant to do so because they restrict their internet shopping due to the threats they can run into.

The overall mean of 4.15 revealed that the shoppers agreed to the level of intention to purchase. The result reveals that consumers are curious about and will explore internet shopping. They will also benefit from online shopping. Additionally, consumers will consistently purchase online more frequently than in physical stores.

5.7 Correlational analysis on the extent of the perceived risks and the level of purchase intention of selected public school teachers in Calapan City

Table 8 Correlational analysis on the extent of the perceived risks and the level of purchase intention of selected public school teachers in Calapan City in terms of its indicators

Extent of Perceived Risks by the selected public school teachers in Calapan City	Level of purchase intention of selected public school teachers in Calapan City		
	r-value	r ²	Result
Product Risk	0.66	0.436	Significant
Financial Risk	0.618	0.382	Significant
Security Risk	0.596	0.355	Significant
Social Risk	0.705	0.497	Significant
Time Risk	0.614	0.378	Significant
Critical r-value:	0.159		
Degrees of Freedom:	196		
Level of Significance:	0.05		

As indicated in the table, there is a significant relationship between the perceived risks and the level of online purchase intention of selected public school teachers in Calapan City. This is tested by a computed r-value of 0.660, 0.618, 0.596, 0.705, and 0.614, which exceeded the given critical value of 0.095. With 196 degrees of freedom at a 0.05 level of significance. Thus, the first hypothesis is accepted.

It is revealed that perceived risks have a significant relationship with online purchase intention. All subfactors of perceived risks, such as product, financial, security, social, and time risks, provided a statistically significant relationship to online purchase intention. It indicates that the higher their perception of perceived risks, the higher their online purchase intention. Even though the product purchased online may fail to function as initially expected, potential loss of time, security loss, loss of status, and financial loss associated with goods will be damaged and sent to the wrong

place. Consumers still consider buying online. These results significantly affect the online purchase intention of selected public school teachers.

Furthermore, the results of this analysis state that despite the risks associated with online shopping, Public School Teachers in Calapan City are still interested in online shopping, frequently consider, and use it, and prefer shopping in physical stores. This is an opportunity for online sellers to profit from.

6. Conclusion

An essential consideration in the decision-making process when shopping online is how consumers perceive risk. This study revealed that online shopping is still risky despite its many advantages. Online sellers must recognize which risk factors are most crucial to Calapan City public school teachers who shop online to reduce perceived risks among consumers and increase purchase intent.

The study examined five dimensions of consumers' perceived risks

- Most online shoppers agreed that they receive a product that fulfills their required product and performance specifications. On the other hand, the shoppers also agree that they have perceived product risk in assessing the quality of the product through the Internet. They can't determine whether the product is legitimate or not or if it is worth the price.
- The online shoppers also agreed that they felt more liberated to use a variety of e-payment alternatives and cash on delivery in settling their payments online. They do not face difficulty in paying for the product they purchase online. In contrast, online shoppers also agree that they perceive financial risk in terms of experiencing monetary loss in receiving useless or wrong items due to the poor service of the sellers and might not get a refund for the incorrect item.
- The shoppers also agree that the sellers guarantee the security of their privacy. They do not leak the information they input into the app or website. On the contrary, online shoppers also agree that they perceive security risks concerning their card account or online wallet not being secure while shopping online. Online shoppers fear that an unknown person might use their card without their consent.
- Aside from that, online shoppers reveal that recommendations of products do not harm the health of your family and friends. In different circumstances, the shoppers also agree that they do not gain admiration in recommending a product they have bought or purchased online.
- In addition, online shoppers agree that they do not waste time shopping online. They can purchase or buy a product anytime they want and not put much time and effort into searching for an item or going to physical stores. Online shoppers also agree that they perceive time risk in terms of the long delivery of the item due to the seller's poor service.
- Lastly, online shoppers also agreed that they are interested in online shopping. Shoppers also decided that they will consider online shopping, use online shopping, frequently do online shopping, and shop online more than they will shop at physical stores.
- The main objective of this study is to investigate the relationships of perceived risks by online shoppers in terms of product, financial, security, social, and time risk. And their purchase intentions as it aims to examine the level of online shoppers' intention towards online purchases as affected by perceived risks. Also, to identify types and contents of perceived risks which are thought to be crucial influences on consumer online purchase intention. This study gives online sellers helpful information about customers and analyzing the dimensions of perceived risks by online shoppers is necessary.
- All five variables of perceived risks by the Public School Teachers indicated a positive influence on the dependent variable: the level of their purchase intention. Thus, the researchers conclude that the hypothesis between the extent of the perceived risks by the Public School Teachers in Calapan City in terms of product, financial, security, social, and time risk and the level of their purchase intention has a significant relationship.
- Moreover, the online purchase intentions of the Public School Teachers in Calapan City are stated. The result of the study shows that despite the presence of risks in online shopping, the respondents are still interested in online shopping. Consider and use online shopping frequently and will consider shopping online more than shopping at physical stores, which is something that online sellers can capitalize on.

Recommendation

The following recommendations are made based on the salient research findings and conclusions.

- Provide useful information to online sellers to create adequate risk-reduction strategies in the online shopping environment.
- Online sellers should be encouraged to reduce the product risks most online shoppers find most concerning. Especially in their efforts to present more information about the products they offer to deal with the uncertainty caused by consumers' inability to judge or examine the quality of the product over the Internet. Examples of this information-presenting include using 3D images to display the product's features, presenting sizing charts and material components, and showing product comparisons. With the help of this information, online customers can build a more thorough impression of the product's quality and external appearance.
- Online sellers should introduce a mechanism that would improve assurance of safety and privacy to motivate people to buy online.
- Online retailers should provide guarantees and a transparent, reasonable return policy to minimize risk. Avoid requiring customers to keep defective or damaged goods and take responsibility when retailers make a mistake. Attempt to put things right. Products can be replaced or refunded by the seller.
- It is recommended that future researchers provide a more extensive age range to be used in this study's replication and a sample that more closely represents the population of online shoppers. This can be done by selecting more respondents from various regions of the city, province, or country.
- Future researchers may consider incorporating more perceived risk dimensions and other variables that affect the likelihood of making an online purchase.

Compliance with ethical standards

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Disclosure of conflict of interest

There is no conflict of interest.

Statement of informed consent

The researchers asked permission from respondents to avoid deception. Respondents have the right to know the purpose of the survey before participating. Therefore, the first page of the Google Forms survey informs respondents about the ratings conducted, the purpose of the study, the method of the results used, and the identity of the supporters. Respondents participated based on informed consent. Respondents are also informed and warranted that their data will only serve as the primary dataset for this study and will only be used for academic purposes. Proponents act responsibly to protect the data collected and prevent privacy threats because it complies with the Data Protection Act 2012. In addition, potential respondents have the right to participate or opt-out of the study without adverse effects.

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