

# Impact of Perceived Risk, Perceived Usefulness and Subjective Norms on Online Shopping in the Context of Pakistan

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## Abstract

*This study shows the quantitative research of online shopping of customers most likely to purchase products online. This study aims to determine and analyze the relationship between factors influencing online shopping and mediators of purchase intention towards online shopping. The study used the population of Pakistan as a target for customers who prefer to shop online and have purchasing issues. Data was gathered from 279 customers using a questionnaire with the help of Google forms. Smart P.L.S. is used to determine statistical measurements to check the acceptance and supportiveness of the hypothesis. The result supported all hypotheses based on the T-statistics and P-value of this study, concluding that perceived risk, perceived usefulness, subjective norms, and purchase intention as mediators positively affect online shopping. The result confirmed that these factors, along with mediators, directly impact the behavior of online shopping consumers. The outcome of this study can be used as guidance for businesses that mostly operate through e-stores.*

**Keywords:** Perceived Risk, Perceived Usefulness, Subjective Norms, Purchase Intention.

## Introduction

Over the past few years, online shopping has been beneficial for both consumers and vendors. In 1991, when the internet opened for the public, Amazon and Zappos were the first online stores in America in 1996. The first online store in Pakistan was Beliscity, which started in 2001 but no longer exists. The Internet has emerged as a useful marketing tool, from advertising products and services to creating brand awareness and increasing customer engagement. The internet has transformed how businesses operated in the past (Bačik, 2016). Online shopping also benefits consumers by allowing them to compare desired products with competitive products based on price, design, color, and quality. Other famous words for online shopping are e-shopping, virtual shopping, web stores, etc. Explicitly in retail business, online spending and e-stores are considerably increasing. The internet makes it easier for businesses to have information on the products and services available to potential customers. Amazon, the biggest online shopping site, is worth \$1.7 trillion. Businesses are using the internet to put across and converse the information;

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it also helps the companies to give an idea about their products and instantly receive the feedback of customer's fulfillment to get stirred turnover for the future. The increase in internet use by customers in all age brackets worldwide has provided an encouraging outlook for online retailers (Baubonienė, 2018). Studying online shopping of consumers has been one of the most important research agendas in e-commerce during the past few years. According to Beleščák (2017) with technological advancement, the world has become a global village where people can easily communicate and operate their businesses, giving them open access to customers, regardless of geographical boundaries. From fashion to electronic goods to groceries, consumers increasingly look for similar products and are influenced in their purchasing decisions (Rakesh, 2017). Online shopping allows the consumer to search for their desired product, gather information about it, evaluate alternatives, and then make the final transaction. Internet businesses have discovered new and better ways to communicate with other businesses and organizations. Some firms are growing rapidly and increasing their business at the maximum level to attain more customers. Somehow, technology has changed as in previous decades, and some companies and firms are working more closely with consumers to reach customer needs and fulfill desires first (Hoffman, 2019). The business has taken an online place for reviews, marketing, selling, and many more services generated by strategic ideas and influencing traditional business. The online shopping business growth has obtained some causes for business professionals. The ease of business has taken many competitors into the market. Global access has reached the entire country faster than local companies because of unique ideas and marketing tactics for business (Ram, 2019). The future seems to be more advanced, and upgrading has also started early with information and consumer acceptance of easy shopping. The strength of online shopping is truly emphasized by trends followed by people's country's culture. The relevancy and comparison of products, brands, and services have taken advantage of consumers, but some unusual scam techniques have been spotted in the cost of brand and company profits (Kau, 2018). E-commerce is the new and regular way of operating a business. Now, the Internet acts as a platform that links buyers and sellers. It is important to improve an e-shopper's satisfaction level, which leads to a higher chance of repurchasing from the same retailer and remaining a loyal online shopping customer. Otherwise, if the shopper is dissatisfied, he's more likely to switch from online to traditional physical shopping mode (Kollmann, 2016). Now is when businesses cannot overlook factors that could either break their customer experience or even put it at risk. Factors like subjective norms, perceived risk, attitude, cultural difference, ease of use, return policy, etc., influence consumers' online shopping (Rudolph, 2016). As online shopping is becoming a customary part of people's lives, optimizing E-commerce stores is necessary when providing a unique and expected customer experience (Ranganathan, 2019). Purchase intention has an impact on online shopping with a direct influence on attraction and consumer mindset using marketing tactics and cost-quality value (Benbasat, 2015). Consumers are more engaged in online retail business selling, and less than-expected costs have been made compatible with products and services. Business development has applied tools for purchase intention with the help of information technology and digital marketing for maximum share and advantages of customer retention. Customer follows quality experience rather than price. People often get more engaged when a product has become their need and fulfilled their expectations. The online business model is a wider network for businesses looking for new opportunities, but only if they have the strength to achieve their goals (Lee, 2017). Online business is statistically predictive as a more important and common source for business in the future, and all businesses will have millions of competitors with compatible prices and short differences in quality variation. The internet service, educated people, more compatible prices, more competitors,

and daily purchase volume are helping in blocking other businesses, and this causes rational businesses to convert online and do business to overcome new challenges for previous online businesses (Pavlou, 2017). The Internet has taken communication place and has a strong bond with information technology, which causes upgrades and new server plots every day. Technological advancements have revolutionized business and marketing tactics, especially online business. Technology has a huge positive impact on online business, but in the past 15 to 20 years, the number of competitors was less, and no compatible price was taken (Newall, 2017). However, with new technological advancements, people are becoming more aware of brands, comparing prices, and choosing suitable products for achievable prices, affecting other business companies. Strategically, the climate for companies has been affected due to the greater impact of the economy and the growth of other online businesses at local and global levels (Nicosia, 2019). Online businesses encourage many benefits and offer cost-free products, but online businesses face scams in underdeveloped countries. The buyer uses to purchase products with good reviews, but this also does not help because of fake reviews and false information on the internet (Onkvisit, 2018). Online businesses have the advantage of 24-hour service. Consumers can buy products or utilize services anytime, anywhere, anywhere. Firms are taking place online business, and this implementation has taken companies close to consumers but increased challenges for small businesses. Somehow, people are engaged and satisfied with the company's direct outlet projects; with time, businesses have also been encouraged other businesses to spend less on other firms' products (Park, 2016). According to Pakistan's E-commerce Index curated by Daraz (Online marketplace and logistic company), which has the largest population, Punjab has the highest contribution to e-commerce order shares at 55%, followed by Sindh at 36%. Balochistan, KPK, and Azad Kashmir contribute 9% (Dawn, 2020). Online shopping has revolutionized business; even small businesses can easily make a reputation with equal platform rights. Business owners can easily connect to customers and listen to customer problems to solve and retain customer loyalty. Online shopping has also evolved in Pakistan to connect worldwide and grow business (Peters, 2017). However, due to scams and international reputations, Pakistan cannot sell products to foreigners using online platforms. Even if Pakistan's customers are willing to purchase products from different countries, they must pay taxes or duties, which charge more than the product price (Popielarz, 2017). The government's involvement in business causes more problems for consumers, and they are indirectly forced to purchase products from their own country. But in the past few months, Pakistan has decided on foreign business to build a chain within Pakistan's geographic area, which makes a more comfortable purchasing platform for consumers (Jamil, 2016). Amazon and E-bay have a contract to build businesses in Pakistan within this year. Still, most reasons for scams and inconvenient sellers showed a nonprofessional attitude toward online companies, and they had to delay contracts for online business ventures (Jiang, 2018). Certain drivers influence purchase intention regarding online purchasing, such as Perceived risk, Perceived Usefulness, and Subjective Norms. Many studies examined factors affecting online shopping, most of which secluded a few major factors, usually between three and six. These factors will allow us to better understand online consumer behavior by recognizing the impact of consumer beliefs, attitudes, and intentions toward online shopping (Jose, 2018).

## **Literature Review**

### **Online Shopping**

Due to technological advancements and internet inventions, rent and online shopping have become new shopping methods. Consumer behavior toward online shopping is changing dramatically (Yi,

2016). People were reluctant to shop online for certain reasons, but consumers have also adopted new shopping habits over the last decade. Communications and trading are much more stable and faster. E-commerce has caught the attention of many retailers. With the emergence of this new mode of shopping, consumers have multiple options before making a final purchase (Vaid, 2020). Consumers can compare the price and quality of the products with the competing brands and read online reviews about the brands and their products. Brands also upload all their products and catalogs online for customers' convenience. An important dimension to understanding this shopping mode is to understand the "consumer's attitude" towards online shopping and the factors that influence their decision (Rudolph, 2016). Online shopping helps to save time because consumers only need to look for the products on search engines like Google or Yahoo, and they can find full information about the desired product (Roca, 2009).

In China, many factors are involved in online shopping; firstly, it is about customer satisfaction with products, quality, and price for all races. Operon first adopted the customer satisfaction model, and this was using the simple theory of disconfirmation; this study took reviews from the purchasers, and negative reports directly involved the investigation of the shop and owner. This build strong customer relations with retailers and small businesses operating online because there were neglected risks of losing money, and customers became more aware of purchasing products online (Reid, 2017). Online businesses are more concerned about customer demands and expectations to cope with convenient practices. Consumers adopt three strategies for essential online products: trust, return policies, and delivery sources. Customer satisfaction is a sub-factor for perceived risk, and it also values product, company, and website reputation for further service (Ranganathan, 2019).

Web design and security have an important place in online shopping and directly affect the attitude of online businesses, which distracts customer attention. The security threat is one of the competitors' advantages and may present a bad impression on the customers' minds about the website. Fake information makes customers uncomfortable with stolen personal data; they may not have to sign up next time. The loss of customers with competitors' web traffic may affect other customers (Ramayah, 2015). Web design is one of the market tools used to attract customers and provide easy access to all products with the same method of delivery option. The design color scheme, font style, relative message, and core information make customers' purchases trustworthy and loyal for next time. In the past few years, online sellers have focused more on promoting products through social media advantages, which takes targeted customers close to the product and increases customer traffic (Raman, 2011).

Web marketing is already popular in developed countries but still needs to catch up in underdeveloped countries. Brands need to improve e-shopper satisfaction to increase the chance of purchasing from the retailer again and make them loyal E-customers. Among the many advantages of online shopping is that people can shop from the comfort of their computer or tablet; it is easier to compare prices and avail discounts offered and shop anytime (Ram, 2019).

### **Perceived Risk**

When a consumer makes an online purchase, they go through many stages before making the final purchase. Every time consumers decide to shop or buy a product, they have certain doubts about it. These doubts are about whether the product will meet the expectations they have about the product (Rakesh, 2017). Online shoppers have fears since they cannot see, touch, or smell the products before buying; thus, they tend to perceive a higher level of risk. In online stores, consumers may have low trust and be at higher risk than in physical stores. Different types of risks

are involved, such as financial, non-delivery, and product risks (Pras, 2011). These risks exist due to technology failure or human error. Consumers might shift towards physical stores when there is a higher perceived risk; thus, businesses need to make their web stores more reliable (Popielarz, 2017).

Every consumer has a different anticipated risk, and some may have financial risk. They are afraid that the purchase might strip off their income at some time or if the product differs from what is shown on the website. Some fear the payment procedure and whether their payment system is secure enough. Others may have anticipated product risk, which involves the consumer having doubt or fear about the product's durability if it fails to perform its intended function. Non-delivery Risk is when consumers have concerns about product replacement (Park, 2016). If a product fails after a few days of purchase, the manufacturer must ensure it can be exchanged. The business's reputation and selling style are important in increasing or decreasing the risk. Having a positive reputation lowers the anticipated risks consumers have about the brand, so businesses increase the repute of their brand positively and increase the consumers' trust. Businesses should be attentive to customers' needs by reassuring them and answering all their queries. Some researchers emphasize that perceived risk negatively impacts consumer trust in online shopping (Onkvisit, 2018).

Perceived risk is more than trust in buying a product from a consumer's point of view. It is about price comparison, quality features, and easy availability in the market. Perceived risk is the involvement of trust, information, and technology for all products, and in online business, it is more risky for customer retention (Nicosia, 2019). The strategic tactics for marketing in online business create a monopoly for consumer behavior and challenge the number of companies involved in competition. The developed countries have adopted measurement tools for market directions and prediction of challenges for a new business to overcome the risk of business. The term perceived risk is the value of a company's reputation, especially online, because it is not just engaging one's customer satisfaction but also in view of millions of other customers (Newall, 2017).

Perceived risk includes consumers' resistance to purchasing products and non-ethical explanation responses that negatively impact online business. The challenge for online businesses is to overcome negative reputations and media reports because they may influence other products. From a consumer point of view, negative or positive reviews may change the minds of willing customers (Nawaz, 2015). The customer always looks for quality with competitive prices. Consumers focus on products that support their needs. Many small firms have used consumer surveys to target customer trust and increase the chances of buying a product, the first showing problems for customers and solutions with quality-price relevancy (Lewis, 2019).

Consumers fear the disclosure of their sensitive information through online transactions. The concern involves the risk of misusing personal information such as their residential address, contact number, and debit and credit card number. In literature, comparative studies among online and non-online shoppers contribute significantly to online vendors' implications. Businesses must make their websites more transparent and improve their marketing strategies to make their virtual stores more reliable and competitive (Kollmann, 2016).

### **Perceived Usefulness**

Online shopping is gaining more fame. This mode of shopping does not involve any mediators in the transaction process. Customers pay and purchase the product or service directly from the seller. Perceived usefulness is consumers' perception that shopping from an E-store will ease and increase



their shopping experience (Kau, 2018). Perceived usefulness considers all things being alike and how a website for shopping can increase consumers' shopping experience after the purchase. A customer is more likely to adopt the product when usage is supposed to be useful. Perceived usefulness has a positive impact on online shopping intention. It also helps to increase perceived value (Lee, 2017).

Consumers are involved in product comparison and share product information and experience on daily usage of products. This impacts businesses, especially online business ventures. Due to global access to online businesses, consumers believe in change concerning others' reviews of products. The perceived usefulness is more about the productivity of brands used daily and deeply impacts consumer purchasing habits. If a customer wants to buy a cell phone for a new model, the most important thing is to reach affordable products available and gather information from the surroundings (Jose, 2018). Perceived usefulness mainly focuses on the attitude of consumers who use any competitor's product and his/her behavior toward any other company product with reason for not choosing them. Online shopping provides online payment options with payments for purchased products within seconds, but due to personal ID being stolen, any third person can use numbers for illegal transactions (Jiang, 2018). In the past few years, online transactions have also changed with biometric security and fewer chances of stolen information. Online transactions are used through bank contracts. In Pakistan, the other options for online purchasing are mobile accounts, bank accounts, or cash-on-delivery options; the widely used method is the cash-on-delivery method, which is a more convenient system for all users (Jamil, 2016). Online shopping websites offer pleasant experiences and benefit customers by providing useful information about the product. For experienced internet users who normally shop online, the accessibility and speed of the internet may be beneficial. In detail, information, access, speed, and convenience are the main benefits of online shopping. Perceived usefulness plays an important role in changing consumers' attitudes toward purchasing. Perceived risk as an influencer of online shopping and sustainable advantages of online shopping are referred to as perceived usefulness. Finding good bargain prices, discounts, and offers on search engines acts as perceived usefulness (Kim, 2018).

### **Subjective Norms**

Subjective norms are defined by Nurul et al. (2015) as when someone forces others like close relatives, friends, family members, or any other person who takes action of a person's discussion and forces them to purchase goods for no reason but for the pleasure of another person. This station is referred to (Ajzen, 1991), who said about purchasing behavior that the thing keeps close to others is people's perception; when you ask someone to purchase goods even when they do not need them, then the person must be your known because it only happens when a person creates a perception in other people mind for the sake of business purpose then it will take time but sometimes perception can be created early due to other person behavior (Chen, 2015).

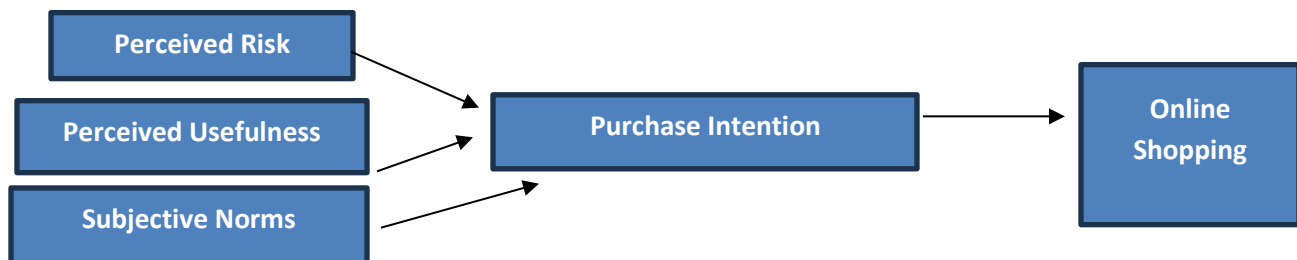
When someone uses close links to build a business, the subjective norms mostly repeat in families. Subjective norms are one of the well-being strategies at business startups, but with time, businesses gain a reputation by quality, and it cannot depend on personal relations. In online business, subjective norms are highly concerned about making business known at first (Baubonienè, 2018). People will buy only when they know you. Online shopping is always based on consumer perception that has been created or changed by experience, which can be a cause for influencing other customers. However, if the customer is known, they prefer personal relations to business (Hoffman, 2019).

### Purchase Intention as a Mediation

Different researchers have shown a relationship between attitude and online shopping intention. The final stage of online transactions is the intention to purchase from the website. Online purchase intention is very important in understanding online consumer behavior (Kim, 2018). The purchase intention can be defined as the condition between the buyer and the seller when the buyer is ready to make the transaction. The process of purchase intention starts with the evaluation of the product. The evaluation process is based on an individual's experience, current knowledge about the product, and some external factors influencing the purchase intention (Hoffman, 2019). Purchase intention grows through communication and development systems and is significant in the economic role.

The consumer mostly follows the trends of society and the traditions of the geographic sector. The adoption of purchase intention is due to the environment; the online business also impacts the geographic sector and may be affected by state currency (Davis, 2019). Online purchase behaviors include delivery time, return policy, and payment. Consumers need help buying online products through foreign exchange; the currency difference causes a time-consuming process, and duty and security problems delay the delivery of products. The problem is mainly in underdeveloped countries, especially Pakistan (Dawn, 2020). The dimensions of online product purchase are channel, information, customer service, and delivery process. The four dimensions are more important for online shopping businesses and gain the maximum attention of customers. The channel, where to buy it, and its reputation matter. Is it more reliable to purchase than others? Are there other options for this product's availability, and what is their reputation for selling it? Customer service is the main target of online sellers because the consumer never waits for the products; faster service will get more attention from new customers and retain previous customers (Gounaris, 2016). The delivery method and process of linking the seller to the customer with the help of the supply chain model creates benefits for all three parties: Quick reaching product for the customer, affordable service charges for delivery companies, and product price includes profit for the seller. Online shopping has entered a new era of technology, where all businesses operate through mobile functioning.

**Figure 1: Research framework**



The strong dimension of online shopping is the consumers' trust in the products. The purchase decision may be influenced by previous judgments and opportunities for other competitors (Benbasat, 2015). External factors also play an important role in purchasing intention by influencing consumers' attitudes toward online shopping. Purchase intention is the urge to buy a product in a certain purchasing environment. Online purchase intention is the willingness of the consumer to make an online purchase (Beleščák, 2017). In understanding the individual's online purchase intention, it is essential to work on the trust factor. Purchase intention is the choice-

making procedure where the buyer finally decides to purchase from online stores. Online stores can gain trust by making their products more promising and secure or service quality. Shoppers who trust websites are likelier to have a positive attitude towards online purchases. Thus, website information may increase the intent to purchase or repurchase from the website (Bačík, 2016).

### **Hypothesis Development**

H1: Perceived risk has positive relation with online shopping.

H2: Perceived usefulness has positive relation with online shopping.

H3: Subjective norms have positive relation with online shopping.

H4: Purchase intention as mediator between Perceived risk, Perceived usefulness, Subjective norms and online shopping.

### **Research Design**

This study is descriptive research, the method chosen to analyze the hypotheses and assess the empirical links between the independent variable, which consists of subjective norms, perceived usefulness, and purchase intention as mediators, and the dependent variable, online shopping. This study is a quantitative type of research that seeks to explain relationships among variables since the primary objective was to study the impact of those variables that have been suggested as influencing online shopping. The relationship between each variable of perceived usefulness, subjective norms, purchase intention as mediators, and online shopping will be examined for the present research. The study used statistical analysis such as PLS-SEM to describe and investigate the relationships between population characteristics. Descriptive research usually uses statistics to show frequencies, percentages, and averages. It is mainly valuable when an area is first investigated. In the present study, descriptive research is utilized to describe the personal data of the respondents, which means that the approach in this study is focused on looking at variables at a specific point at one time in the data collection process.

### **Unit of Analysis**

The target population of the present study refers to the consumers who are most likely to be loyal to one brand and interested in buying products online. Therefore, the unit of analysis in the study is individuals. However, the sampling frame refers to the consumer. People are aware of online shopping, but mostly, the reason is devoted to buying. This study focuses on the impact of subjective norms and perceived usefulness in creating and maintaining strong business relations with the people of Pakistan. Meanwhile, the respondents of this study are the employees who provide feedback in a five-point Likert scale survey. The online shopping consumer was chosen because they already have experience in online shopping and can understand the overall characteristics of their previous experience to provide more information about their online shopping.

### **Sample Size and Sampling Technique**

As mentioned earlier, the population of this study consists of online purchase consumers in Pakistan. Sampling is done in quantitative research to study the representative sample that closely reproduces characteristics of interest in a greater population. A total number of consumers, more than 200, have been selected for research. Information gathered from consumers is likely to purchase online products but may have some inappropriate experience in some products. The sampling guidelines are used because they reflect the true population characteristics by considering



the aspects of confidence and precision in determining the right sample size chosen in this study (Lee, 2017). The study employed a simple random sampling. In this technique, the sample was selected from the population using random procedures to accurately give the same chance of being selected for every population unit. Moreover, simple random sampling is used because there is no bias that an online product purchaser will be selected over another, and the selection of a consumer does not bias the researcher against the selection of another.

### **Data Collection**

Based on the hypothesis and objectives of the present study, the questionnaire is used for data collection, which was considered the most appropriate data-collection method to gather information and responses. The questionnaire in this study is used to collect data simultaneously to get responses quickly. Therefore, data collection is conducted through a self-administered questionnaire (The questionnaire is completed through the data collection without distracting the respondent) (Kau, 2018). Under this technique, researchers created Google forms using Google platform questionnaires to respondents by sending to the email addresses or WhatsApp numbers of selected online product purchase consumers. Based on this, the process started with contacting the selected consumers through their email addresses and phone calls, followed by a cover letter that explains the objectives of the study to get approval for data collection; after the approval, respondents complete the questionnaire and return their respective responses through the researcher's email address, WhatsApp or by submitting Google forms.

### **Measurement**

To fully capture the nature of online shopping for online product consumers in Pakistan. A five-item measurement was adapted from the previous research and hypothesis development; these items were used in this study to assess online shopping in Pakistan. An instrument with five items measures the study's independent variable: perceived risk as an influencer to online shopping. The items were adapted to measure the respondents' perceptions about online shopping of online product purchasers in Pakistan. This study used twenty-one items taken from the Multifactor Leadership Questionnaire (MLQ) Form 5X to measure perceived risk Lin (2007) as an influencer of online shopping. However, inter-correlations of .80 to .90 have been reported using the MLQ 5X. Perceived risk as an influencer of online shopping as an independent variable is measured using a five-point Likert Scale ranging from 1 = strongly disagree to 5 = strongly agree (Kollmann, 2016).

Perceived usefulness as an influencer in online shopping is measured by the Multifactor Behavior Questionnaires (MLQ-Form 5x) adapted by Lin's scale (2007) consisting of five items. A five-point Likert scale was used as the measuring scale for each question, ranging from 1 to 5, with the answers being strongly disagree and strongly agree, respectively.

Subjective Norms as an influencer in online shopping are measured by the Multifactor Behavior Questionnaires (MLQ-Form 5x) adapted by Lin (2007) consisting of five items. A five-point Likert scale was used as the measuring scale for each question, ranging from 1 to 5, with the answers being strongly disagree and strongly agree, respectively.

Finally, mediator, purchase intention is measured using a five-item measurement with a five-point Likert Scale ranging from 1 to 5, strongly disagree and strongly agree, respectively. The items were adapted. The inter-correlations range from 0.6 to 0.9, which shows reasonable test validity.

## Descriptive Statistics

**Table 1: Descriptive Statistics (P.L.S)**

	No.	Missing	Mean	Median	Min	Max	Standard Deviation
OS1	7	0	3.71	4	1	5	0.585
OS2	8	0	3.703	4	1	4	0.581
OS3	9	0	3.688	4	1	5	0.592
OS4	10	0	3.652	4	1	4	0.626
OS5	11	0	3.695	4	1	5	0.596
OS6	12	0	3.681	4	1	5	0.606
OS7	13	0	3.742	4	1	4	0.566
OS8	14	0	3.717	4	1	5	0.576
OS9	15	0	3.724	4	1	4	0.573
OS10	16	0	3.731	4	1	5	0.583
PR1	17	0	3.652	4	1	5	0.597
PR2	18	0	3.674	4	1	4	0.62
PR3	19	0	3.706	4	1	5	0.592
PR4	20	0	3.685	4	1	5	0.605
PR5	21	0	3.746	4	1	4	0.565
PI1	22	0	3.756	4	1	5	0.547
PI2	23	0	3.706	4	1	4	0.58
PI3	24	0	3.703	4	1	5	0.588
PI4	25	0	3.667	4	1	4	0.622
PI5	26	0	3.713	4	1	5	0.578
PU1	27	0	3.695	4	1	5	0.602
PU2	28	0	3.703	4	1	4	0.575
PU3	29	0	3.681	4	1	5	0.612
PU4	30	0	3.706	4	1	4	0.528
PU5	31	0	3.688	4	1	5	0.574
SN1	32	0	4.351	4	1	5	0.798
SN2	33	0	4.33	4	1	5	0.824
SN3	34	0	4.315	4	1	5	0.821
SN4	35	0	4.262	4	1	5	0.871
SN5	36	0	4.301	4	1	5	0.857

## Content Validity

Validity is about to check questions at statistical measurement as according to study. It makes proof for clean research and show the accurate measurement of model test. This is statistical measurement to show 100% research result and relation of variables. Content validity is use to describe and build appropriate measurement for the concept of study by using measurements. This is ensured through reviewing all data from research as related literature and previous experiments, research and theories based on studies. From all the research analysis factor, the variable correctly assigned to their actual constructs and higher loading have corresponded to highlight to show positive relation. Moreover, item loading makes surety for constant validity of measurement as used in all study as shown as followed table.

**Table 2: Loading factors**

	Online Shopping	Perceived Risk	Perceived Usefulness	Purchase Intention as Mediator	Subjective Norms
OS1	0.83				
OS10	0.882				
OS2	0.819				
OS3	0.85				
OS4	0.848				
OS5	0.849				
OS6	0.85				
OS7	0.95				
OS8	0.836				
OS9	0.943				
PI1				0.855	
PI2				0.831	
PI3				0.877	
PI4				0.864	
PI5				0.846	
PR1		0.814			
PR2		0.842			
PR3		0.848			
PR4		0.809			
PR5		0.936			
PU1			0.867		
PU2			0.906		
PU3			0.871		
PU4			0.846		
PU5			0.788		
SN1					0.91
SN2					0.886
SN3					0.939
SN4					0.899
SN5					0.84

### Convergent Validity

Convergent validity is the degree to which multiple items measure the same concepts in agreement. Factor loadings, composite reliability (CR), and average variance extracted (AVE) are used simultaneously to assess convergent validity, as proposed. Composite reliability provides a more appropriate measure of internal consistency reliability. By employing composite reliability, PLS-SEM is able to accommodate different indicator reliabilities. In this study, validity was assessed by evaluating a construct's convergent and discriminant validity. Supporting data are provided for convergent validity when each item has outer loadings above 0.5 and each construct's average variance extracted (AVE) is 0.5 or higher. The composite reliability values range from 0.929 to 0.968, which exceeds the recommended minimum value of 0.7.

**Table 3: Analysis of convergent validity**

		<b>Loadings</b>	<b>A.V.E</b>	<b>C.R</b>	<b>C Alpha</b>
Online Shopping	OS1	0.83	0.752	0.968	0.968
	OS10	0.882			
	OS2	0.819			
	OS3	0.85			
	OS4	0.848			
	OS5	0.849			
	OS6	0.85			
	OS7	0.95			
	OS8	0.836			
	OS9	0.943			
Purchase Intention	PI1	0.855	0.725	0.929	0.928
	PI2	0.831			
	PI3	0.877			
	PI4	0.864			
	PI5	0.846			
Perceived Risk	PR1	0.814	0.733	0.932	0.932
	PR2	0.842			
	PR3	0.848			
	PR4	0.809			
	PR5	0.936			
Perceived Usefulness	PU1	0.867	0.73	0.931	0.931
	PU2	0.906			
	PU3	0.871			
	PU4	0.846			
	PU5	0.788			
Subjective Norms	SN1	0.91	0.802	0.953	0.953
	SN2	0.886			
	SN3	0.939			
	SN4	0.899			
	SN5	0.84			

### **Discriminant Validity**

Discriminant validity was tested by comparing the correlations between the constructs and the square root of the AVE for a given construct. This means that squared AVE is higher than off-diagonal elements in the corresponding row and column, providing evidence of discriminant validity as presented in Table 4.4. The measurement model in this study demonstrates adequate convergent and discriminant validity.

**Table 4: Discriminant validity**

	Online Shopping	Perceived Risk	Perceived Usefulness	Purchase Intention as Mediator	Subjective Norms
Online Shopping	0.867				
Perceived Risk	1.033	0.851			
Perceived Usefulness	1.005	1.009	0.856		
Purchase Intention as Mediator	1	1.015	0.995	0.855	
Subjective Norms	0.762	0.77	0.822	0.85	0.896

### The Structural Model

In the second phase of analysis, the structural model was assessed. In this stage, bootstrapping is a resampling strategy that been used and draws an extensive number from claiming subsamples, starting with unique information and estimating models for every subsample. The hypotheses of the structural model are tested using PLS. This is achieved by running the PLS-SEM algorithm; way coefficients represent the guessed relationship around constructs. The researcher needs to figure out whether the coefficients are statistically significant. Otherwise, bootstrapping can refer to any test or metric that relies on random sampling with replacement. Bootstrapping allows assigning measures of accuracy as it is defined in terms of bias, variance, confidence intervals, and prediction error or some other such measure to sample estimates. This technique allows estimation of the sampling distribution of almost any statistic using random sampling methods. After bootstrapping table 5, showed the institutionalized way sample mean (M), standard deviation (STDEV), t-values, p-values, and decision made.

**Table 5: Hypothesis Testing Result**

Hypothesis	Items	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Decision
H1	Perceived Risk -> Online Shopping	0.604	0.609	0.055	11.042	<b>0.000</b>	Supported
	Perceived Risk -> Purchase Intention as Mediator	0.634	0.626	0.058	10.854	<b>0.000</b>	Supported
H2	Perceived Usefulness -> Online Shopping	0.267	0.273	0.06	4.461	<b>0.000</b>	Supported
	Perceived Usefulness -> Purchase Intention as Mediator	0.168	0.181	0.068	2.49	<b>0.013</b>	Supported
H4	Purchase Intention as Mediator -> Online Shopping	0.173	0.161	0.056	3.093	<b>0.002</b>	Supported
H3	Subjective Norms -> Online Shopping	-0.052	-0.051	0.015	3.381	<b>0.001</b>	Supported
	Subjective Norms -> Purchase Intention as Mediator	0.211	0.206	0.031	6.722	<b>0.000</b>	Supported

T value is greater than 2, P value is less than 0.01.



Table 5 demonstrates the relationship between perceived risk and perceived usefulness as influencers in online shopping and purchase intention as mediators. Results show that the relationship between perceived risk and online shopping is supported at the 0.01 level of significance (STD=0.055,  $t=11.042$ ,  $p=0.000$ ). The relationship between purchase intention as a mediator for perceived risk and online shopping is strongly supported at the 0.01 significance level (STD=0.058,  $t=10.854$ ,  $p=0.000$ ). The results also show that the relationship between perceived usefulness and online shopping is supported at the 0.01 significance level (STD=0.056,  $t=4.309$ ,  $p=0.000$ ). The relationship between purchase intention as a mediator for perceived usefulness and online shopping is supported at the 0.01 level of significance (STD=0.068,  $t=2.49$ ,  $p=0.013$ ). The relationship between purchase intention and online shopping is supported at the 0.01 level of significance (STD=0.056,  $t=3.093$ ,  $p=0.002$ ). The relationship between purchase intention as a mediator for subjective norms and online shopping is supported at the 0.01 level of significance (STD=0.031,  $t=3.622$ ,  $p=0.000$ ). The relationship between subjective norms and purchase intention is supported at the 0.01 level of significance (STD=0.0015,  $t=3.381$ ,  $p=0.001$ ).

## Discussions

Hypothesis H1 stated a positive relationship between perceived risk and online shopping for screen customers. The empirical findings for this hypothesis achieved a high score of (STD=0.054,  $t=11.812$ ,  $p=0.000$ ). The finding has shown a positive relationship between perceived risk and online shopping. This is consistent with the result of a study (Masoud, 2013), which determined this relationship for consumers who are most likely to purchase online products. Hypothesis H2 in this study states a significant relationship exists between perceived and online shopping among consumers likely to purchase online products. The empirical findings for this hypothesis achieved the highest score (STD=0.056,  $t=4.309$ ,  $p=0.000$ ), supporting the hypothesis.

It supports the findings Ramayah (2019) that perceived usefulness and online shopping have a positive impact. It aligns with the technology that has been providing a more efficient state, but the internet's lack of training and scams make thousands of online shoppers useless. Fake products or extraneous delays in delivering products deeply impact customer shopping behavior and cause them to change their minds. Perceiving an easy source for shopping with defined quality and promise makes customers feel free with money and gain trust for future suitability.

Hypothesis H3 in this study states that a significant relationship exists between subjective norms and online shopping among consumers most likely to purchase online products. The empirical findings for this hypothesis achieved the score (STD=0.031,  $t=3.622$ ,  $p=0.000$ ), supporting the hypothesis. Subjective norms have a positive impact on online shopping. The more people follow you, the more beneficial it is for business. The people who are known for business will enhance sales at the beginning. However, with time, the quality, promise, and feedback will cover up business and develop new strings for customer retention. According to this study, purchase intention mediates perceived risk and usefulness with online shopping. The consumer preference for online products is due to the interest that has been created through marketing tactics and promotion as well. The more customers engage with online activities, the more interest will develop in following trends. The priority for companies is to make customers feel safe, create interest in less expensive products, and have an easy way to deliver products within the promised time.

Moreover, purchase intention also refers to after-sales service. The consumer is more likely guaranteed to come back if the delivered product is the same as described. Consumer engagement with online shopping involves high risk and usefulness by the purchase interest.

## Conclusion

The current study contributes to academic knowledge by providing insights and identifying perceived risk, perceived usefulness, subjective norms, and purchase intention as mediators that affect online shopping. Findings from this work validate and extend theories of perceived values and factors of online shopping in determining exchange relationships to build strong business relationships with customers who prefer online shopping in the market. The theories and studies for online shopping have discovered that perceived risk, perceived usefulness, and subjective norms are those factors that directly influence online shopping, and this study has explanatory research about these variables with purchase intention as a mediator. The current study utilizes PLS-SEM, which is considered a more effective way of analyzing the structural relationships between the main constructs of perceived risk, perceived usefulness, subjective norms, purchase intention as mediators, and online shopping. Based on an empirical approach, the current study suggests that purchase intention as a mediator, perceived risk, perceived usefulness, and subjective norms all together play a valuable role in the enhancement of online shopping, which is validated through the bootstrapping approach as a new perspective for better future research in this area.

## Limitations and Recommendations

Research has shown that perceived risk, perceived usefulness, and subjective norms influence online shopping, with purchase intention as mediators for consumers who are most likely to purchase online products. This study is for companies with online businesses about sustaining consumers by lowering the financial, social, and psychological risk in perceived risk. Moreover, it builds relationships with consumers as they feel free to purchase online products. This research has also taken Daraz customers to check the e-trends and shopping. The findings and statistical analysis by P.L.S have obtained supporting results of perceived risk, perceived usefulness, subjective norms, and purchase intention as mediators in online shopping. These two main factors strongly influence online shopping and have a positive relationship with online shopping. The consumer attitude toward online shopping also depends on purchase intention, which is the interest in the product. If people's perception of the internet is bad as the source of fake products, then it will affect the behavior of other online shopping consumers. Hence, the conclusion has shown that changing the perceived risk, perceived usefulness, and subjective norms with purchase intention as mediators will influence the behavior of consumers toward online shopping.

Further, research can be conducted by finding more explanatory factors such as virtual channels, search engine optimization, or product promotion. Future research will explore more findings and the relationship between factors that influence online shopping. The wide business opportunity will explore more chances of risk and consumer perception toward online shopping in Pakistan.

## References

- Ajzen, I. (1991). The Theory Of Planned Behavior. *Organizational Behavior And Human Decision Processes*, 50, 179-211.
- Bačík, R. S. (2016). The analytical insight into customer perception of quality determinants of the e-commerce model b2c subjects in the central European countries. *Quality Innovation Prosperity*, 18(2), 15-26.

- Baubonienė, Ž. G. (2018). E-Commerce Factors Influencing Consumers' Online Shopping Decision. *Socialinės technologijos Social technologies*, 1, 74–81.
- Beleščák, D. (2017). e-shop ve WordPressu pomocí WooCommerce. *Brno: Computer Press*, 5(1), 978-980.
- Benbasat, D. K. (2015). Trust related argument in internet stores: a framework for evaluation. *Journal of Electronic Commerce Research*, 4(2), 49 – 64.
- Chiu, C. (2015). PRIS: A Multiple-Item Scale for Measuring Perceived Risk of Internet Shopping. *The Journal of International Management Studies*, 10(2).
- Davis, F. D. (2019). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *DOI*, 13(3), 319--339.
- Dawn. (2020). *What do we know about Pakistan's ecommerce industry?* Retrieved from What do we know about Pakistan's ecommerce industry?: <https://www.dawn.com/news/1549691#:~:text=Pakistan's%20first%20Ecommerce%20Index%20%2D%20curated,shopping%20patterns%20over%20a%20year>.
- Gounaris, S. P. (2016). Customer retention: insights from business to business service. *Journal of Business Research*, 58(2), 126-140.
- Hoffman, D. L. (2019). Building consumer trust online. *Communications of the ACM*, 42(4), 80-85.
- Jamil, N. A. (2016). To Investigate The Drivers of Online Purchasing Behavioral In Malaysia Based on the Theory of Planned Behavior (TPB): A Structural Equation Modeling (SEM) Approach. *International Conference On Management*, 453-460.
- Jiang, J.-C. C.-A.-C. (2018). Knowledge and Trust in E-Consumers' Online Shopping Behavior. *International Symposium on electronic Commerce and Security*, 652-656.
- Jose, M. P.-B.-M.-M. (2018). Key factors of teenagers' mobile advertising acceptance. *Industrial Management & Data Systems*, 111(5), 732-749.
- Lee, H. L. (2017). Trust, satisfaction and commitment on loyalty to international retail service brands. *Asia Pacific Management review*, 12(3), 161 -169.
- Kau, A. K. (2018). Typology of online shoppers. *Journal of Consumer Marketing*, 20(2), 139-156.
- Kim, D. M. (2018). Antecedents of true brand loyalty. *Journal of Advertising*, 37(2), 99 – 117.
- Kollmann, T. (2016). Attitude, adoption or acceptance? Measuring the market success of telecommunication and multimedia technology. *International Journal of Business Performance Management*, 6(2), 133-152.
- Lewis, S. S. (2019). Customer loyalty: the future of hospitality marketing. *International Journal of Hospitality Management*, 18, 345–370.
- Lin, H. F. (2007). Predicting consumer intentions to shop online: An empirical test of competing theories. *Electronic Commerce Research and Applications*, 6(4), 433–442. <https://doi.org/10.1016/j.elerap.2007.02.002>
- Masoud, E. Y. (2013). The Effect of Perceived Risk on Online Shopping in Jordan. *European Journal of Business and Management*, 5(6).
- Nawaz, T. (2015). Online shopping attitude of women in Sylhet city, Bangladesh. *European Journal of Business and Management*, 7(23), 89-103.
- Newall, J. (2017). Industrial buyer behaviour. *European Journal of Marketing*, 11(3), 166-211.
- Nicosia, F. (2019, May). Perceived risk, information, processing and consumer behaviour: a review article. *Journal of Business*, 6, 162-66.

- Nurul, A. H. (2015). *The Relationship of Attitude, Subjective Norm and Website Usability on Consumer Intention to Purchase Online: An Evidence of Malaysian Youth*. International Economics & Business Management Conference.
- Onkvisit, S. a. (2018). The diffusion of innovations theory: some research questions and ideas. *Akron Business & Economic Review*, 20(1), 46-55.
- Park, C. a. (2016, February). Consumer response to television commercials: the impact of involvement and background music on brand attitude formation. *Journal of Marketing Research*, 11-24.
- Pavlou, P. A. (2017). Consumer acceptance of electronic commerce – integrating trust and risks with the technology acceptance model. *International Journal of Electronic Commerce*, 7(4), 101- 134.
- Peters, T. a. (2017). Experience the key issue in eliminating automation risk. *Material Handling Engineering*, 42(4), 97-8.
- Popielarz, D. (2017, May). An exploration of perceived risk and willingness to try new products. *Journal of Marketing Research*, 4, 368-372.
- Pras, B. a. (2011). Perceived risk and composition models for multi-attribute decisions. *Journal of Marketing Research*, 15(3), 429-37.
- Rakesh, S. &. (2017). Impact of promotions and value consciousness in online shopping behaviour in India. *Journal of Database Marketing & Customer Strategy Management*, 19(4), 311-320.
- Ram, S. &. (2019). Consumer resistance to innovations: the marketing problem and its solutions. *Journal of Consumer Marketing*, 6(2), 5-14.
- Raman, A. A. (2011). Web Services and e-Shopping Decision: A Study on Malaysian e-Consumer. *Wireless Information Networks & Business Information System*, 54-60.
- Ramayah, T. I. (2015). Impact of Perceived Usefulness, Perceived Ease of Use and Perceived Enjoyment on Intention to Shop Online. *Journal of Systems Management*, 1-16.
- Ranganathan, C. &. (2019). Key dimensions of business-to-consumer web sites. *Information & Management*, 39(6), 457-465.
- Reid, L. J. (2017). Communicating tourism supplier services: building repeat visitor relationships. *Communication and Channel Systems in Tourism Marketing*, 3-19.
- Roca, J. C. (2009). The Importance of Perceived Trust, Security and Privacy in Online Trading Systems. *Information Management and Computer Security*, 17(2), 96-113.
- Rudolph, T. R. (2016). Barriers to online shopping in Switzerland. *Journal of International Consumer Marketing*, 16(3), 55-74.
- Vaid, R. (2020). *Stimulus hopes, healthy Q2 expectations to keep sentiments high (IANS Market Forecast)*. Retrieved from Stimulus hopes, healthy Q2 expectations to keep sentiments high (IANS Market Forecast): <https://menafn.com/1100935630/Stimulus-hopes-healthy-Q2-expectations-to-keep-sentiments-high-IANS-Market-Forecast>
- Yi, J. L. (2016). Factors Influencing Online Shopping Behavior: The Mediating Role of Purchase Intention. *International Economics & Business Management Conference*, 7, 401 – 410.