

#### Impact of Perceived Benefits and Perceived Risks on Online Shopping Behaiour with Mediating Role of Purchase Intention

## Sidra Abdul-Wahid<sup>1</sup>, Muhammad Ahmad<sup>2</sup>, Huma Ijaz<sup>3</sup>

## Abstract

Online purchasing has revolutionized consumer market. It allows individuals to access a variety of products with a single click. With evolution of e-commerce understanding the factors influencing online shopping behavior is imperative for firms to remain competitive. This study investigates the relationship between perceived benefits (PB) and perceived risks (PR), mediated by purchase intention (PI) on online buying behavior (OSB). Six key elements—shopping convenience, product variety, price advantage, product risk, privacy risk, and financial risk—were evaluated through data collected from 300 internet shoppers via a structured questionnaire. The data is analyzed with SPSS. Results underline the significance of convenience, product variety, and price advantage in stimulating online purchases, with PB positively impacting customers' online purchasing behavior (OPB). Conversely, perceived risks negatively affect online shopping decisions, necessitating efficient risk management strategies to bolster consumer confidence. The mediation role of PI was examined using the Hayes macro process, revealing its significance in the relationship between PB, PR, and OSB. Notably, PI mediates the impact of both PB and PR on OSB, highlighting its pivotal role in shaping consumers' online purchasing behavior. These findings offer actionable insights for businesses, emphasizing the importance of leveraging PB to encourage beneficial purchasing intentions and mitigate PR to foster online shopping behavior. Ultimately, this study contributes to a deeper understanding of consumer decision-making in online settings, facilitating the development of targeted marketing strategies and enhancing overall online shopping experiences.

Keywords: Online shopping behavior, purchase intention, perceived benefits, and perceived risk

## 1. Introduction

Web-based e-commerce has grown dramatically over the past 10 years as consumers increasingly recognize the convenience and affordability of online buying. However, as shoppers' preferred methods of buying have moved away from conventional physical stores to online retailers, they have begun to worry about problems including the theft of their confidential data, fraudulent activity on the internet, inequalities in the item's quality and rating, failed deliveries, and many more. Electronic commerce enables the consumer to purchase immediately from the supplier on an internet browser without any third party. Online shopping (OS) has performed a crucial part throughout the last two decades, and greater than 1.6 billion customers worldwide purchase products online, and this mechanism created US\$ 1.90 trillion in 2016. (Rehman et al, 2019). In addition, OS demand is on the rise every day, because people are aware of it, that OS is also comfortable because they can buy from their residences. Thus, it offers comprehensive knowledge about the commodity with just a single tap. Consumer behavior is a substantial issue as people choose, order, and review products by purchasing goods and/or services. There are several variables influencing OS and CB. These variables include perceived threats, such as product risk, Risk of privacy and financial risk and PB such as SC and product variety (Bhatti, Rehman, 2020). Without a doubt, the introduction of the internet has made the procedure simpler for customers. In spite of these advantages, the perceived risks in the minds of consumer may constitute an obstruction to the consumer intent and the actions of consumer. That's the primary cause that online purchasing in Pakistan is quite cheap and consumers acceptability is the most daunting challenge for digital retailers (Bhatti, 2018). Perception risk has been presented in customer's conduct and in expression of marketing in the slightly earlier 60s and the notion of OS, it was adopted in preliminary 1990s (Bauer, 1960).

Various elements have an impact on OS behavior and these elements are included PR and PB. The PI of the consumer is an important indication for the customers (Bhatti, 2018b; 2018c). In Pakistan, the electronic commerce is quiet at the starting phase and is comparatively thin in contrast with industrialized and other emerging countries (Altaf et al, 2010). As stated to the survey, Pakistan is the second to last country to go shopping online due to the different types of shopping risks, internet inaccessibility, lower education levels and lack of knowledge (Nielsen, 2008). Just 3% of Pakistan's Buying online from the entire population and the present electronic commerce industry is approximately \$70-150 million is estimated to increase by \$1 trillion by 2020 (Bhatti, Rehman, 2020). In addition, electronic commerce industry in Pakistan is not close to 00.1 of its total retailing market shares. however, in other nations, this percentage is higher, Example: China's electronic commerce revenues counted for 18-20% of total market share and US electronic commerce revenues recorded for 8-9% of total market shares of retail (Pak wired, 2017, July 20).

## **1.1.** Research problem

Multiple researches have focused the behavior of OS, but it is quiet a massive issue and necessity to be studied and concentrate on OS behavior in Pakistan (Bhatti & Rehman, 2020). Moreover, prolong lock-downs due to COVID-19 pandemic required organizations to function virtually by developing online platforms for selling their products and/or services. Even in early 2021, lock-downs are still being observed by majority of the countries. This situation catches the attention of scholars who have to propose innovative strategies for the corporations to utilize internet channels in order to market their goods and/or services. Therefore, set the primary purpose of this research to explore the multiple aspects, such as PB and PR that affect the conduct of OS behavior in Pakistan. By minimizing the threats and improving the advantages we will be able to Increased online shopping.

#### **1.2.** Research Questions

• What are the determinants that shape Pakistani consumers' intentions to make online purchases?

<sup>&</sup>lt;sup>1</sup> M.Phil. Scholar, Department of Management & Administrative Sciences, University of Narowal, Punjab, Pakistan

<sup>&</sup>lt;sup>2</sup> Assistant Professor, Department of Management & Administrative Sciences, University of Narowal, Punjab, Pakistan, <u>m.ahmad@uon.edu.pk</u>

<sup>&</sup>lt;sup>3</sup> M.Phil. Scholar, Department of Management & Administrative Sciences, University of Narowal, Punjab, Pakistan

- To examine how perceive risk affect Pakistani consumer online purchases?
- To examine how perceive benefit shape Pakistani consumer intention to make online purchases?
- To examine ether purchase intention mediates the relationship or not mediate the relationship between dependent and independent variables?

# **1.3.** Research objectives

- To evaluate the main reasons for consumers' acceptance and non-acceptance of OSB.
- To inspect the impact of PB on OSB.
- To evaluate the impact of PR on OSB.
- To examine the effectiveness of Consumer purchase intention on driving OSB.
- To analyze the mediating role of purchase intentions on relationship of perceived benefits and perceived risk with OSB.

# 2. Literature Review

# 2.1. Perceived benefits

In online shopping, the Internet poses some challenge, but it also provides there are several benefits that alter the perception of customers when shopping online. The perceived advantages are the confidence and contentment of customers with OS and the view point of customers that shopping online is comfortable, simple, wider variety range of goods and less risky than conventional purchasing (Bhatti & Rehman, 2020). The perceived benefit of being able to access to an extensive selection of products in OS is one of the main variables that attracts customers to this method of shopping; multiple investigation has looked into the impact of this benefit on the buying habits of consumers as compared to traditional shopping. This review of academic literature aims to examine previous studies on perceived advantages and how they affect consumers' behavior when shopping online. This review attempts to improve our general understanding of the impact of PB in influencing customers' OS behavior by synthesizing the data from many studies.

## 2.1.1. Shopping convenience

The Internet made our lives easier and within seconds we might do a hasty searching for our favorite goods and then shop whatever we want quickly (Bhatti & Rehman, 2020). Convenience offers four choices in the purchasing process: access, quest, ownership, and transaction (Seiders et al., 2000). With advancement, consumers are no longer restricted by time constraints at home and might buy anything at any time without having to get out of their homes or travel to the store although 24-hour service is offered by online shopping (To et al., 2007). Prior researches have shown a positive correlation among convenience and consumer OSB (Dost et al, 2015; Bashir et al., 2015). Conversely, several research have discovered that SC has an immense impact on OSB (Rehman, 2018). SC includes a variety of factors, including time savings, simplicity of product search, accessibility, and delivery possibilities. Li and Zhang (2019), for instance, discovered that SC increases consumers' desire to make an online purchase favorably. Similar findings were made by Chen and Chang (2020), who discovered that consumers' sentiments regarding online buying are positively influenced by convenience-related elements including simplicity of use and quick access to product information. According to Wang and Chen (2021), accessibility and ease of product search are additional crucial aspects of purchasing convenience. Online shops frequently offer sophisticated search tools, individualized product recommendations, and intuitive user interfaces to help customers identify desired goods fast. As stated by Liebana-Cabanillas et al. (2019), perceived convenience has also been shown to have a favorable effect on customer feedback with respect to OB, intentions to shop online and actual purchase behavior. Consumers place a high value on time savings as a key component of purchasing convenience. OS makes it simpler for customers to easily browse and buy goods or services without having to go to brick-and-mortar shops. According to a study by Liu et al. (2016), consumers' opinions about accessibility had a favorable impact on their attitudes regarding online buying, their intentions to shop online, and their real online purchasing behavior.

H1: SC has a significant positive impact on OS behavior.

H2: Consumers' PI significantly mediates the relationship between SC and OS behavior.

## 2.1.2. Variety of Products

As compared to traditional shopping, online shopping offers more advantages and comfort. The customer enters in shops physically in traditional shopping; step by step it causes trouble, not everybody has a lot of time to access the stores today. Thus the, the websites offer customers with numerous choices and consumers effortlessly Scan, analyze, compare products with different labels and commodity varieties from their residence without personally going out to stores, and consumers can place their orders through the websites and have the required good and services delivered to their homes (Bhatti, Rehman, 2020). The primary variable that triggers customer interest, encourages them and causes the intention to purchase online is the product variety. Prior literature has shown that the correlation among PV and OS behavior is substantially positive (Kim, Ammeter, 2018). In addition, Lee and Park's (2020) study looked at how product variety can help online shoppers avoid the negative consequences of perceived risks. The results demonstrated that consumers felt more in control of their purchasing decisions and were less impacted by possible risks connected with online buying, such as product quality or seller reliability, when they perceived a broader range of products. Consumers have more options and feel more in control of their purchases when a large variety of products are readily available. Customers like being able to evaluate product characteristics, evaluate available options, and select the ones that best suit their needs. This increases customer happiness and buy (Li et al., 2019). Voskuyl et al., (2018), Consumers associate a wider product variety with increased expertise and trustworthiness of the retailer, influencing their recognition of product quality and purchase decisions. Choi & Kim, (2019) describes in their studies customers are more likely to think they are getting a good value for their money when there is a wide variety of products available that fall within their preferred price range. Higher levels of customer satisfaction are a result of the availability of a variety of product options. Shoppers whose are satisfied with their buying experience are more inclined to continue using the online retailer and make additional purchases, which boosts the lifetime value

of the client and profits over the long run (Voskuyl et al., 2018).

H3: PV has a significant positive impact on OSB.

H4: Consumers' PI significantly mediates the relationship between PV and OS behavior.

# 2.1.3. Price Advantage

When it comes to OS, people have always placed a high value on price. According to Sinha and Heim (2001) Price has become a key variable for consumers on OS. Price discounts could have an impact on consumer price confidence and, ultimately, could have impact on their shopping intent (Biswas&Blair, 1991). The lack of direct costs associated with the distribution of the good is one of the key presumptions for the lower pricing. (E.g. centralized inventory, no rental cost etc.). Often, e-commerce is a lucrative choice for customers, not only a price cut, but exclusive deals offered by online retailers. These marketing offers could be "pay for one, get one free", "free tickets to a case, "discount coupons for future purchases Gifts to each client, swap deals at festivals, etc (Anora, Aggarwal, 2018). Price advantage is a concept that consumers have that internet buying is less expensive than shopping at conventional physical businesses. Price advantage is a major influence of customers' online buying behavior, according to a number of researches (Chiu et al., 2014; Liang & Huang, 2015). According to research, online sales are more prevalent among consumers if they see price reductions as a real benefit (Balasubramanian et al., 2005). In addition, consumers' purchase intentions, repeat purchasing habits, and general contentment with online shopping have been demonstrated to be favorably impacted by price advantages (Kuo et al., 2012; Sorce et al., 2005). The recognizance of price advantage by consumers has a significant impact on how they shop online. Consumers constantly believe that online pricing are less expensive than those in physical stores, according to studies (Grewal et al., 2014; Liang & Huang, 2019). Discounts, promotional offers, and the lower operational costs related to online shops are some of the elements that contribute to this perspective (Jiang et al., 2015). Consumers' judgments of price fairness are positively influenced by price comparison, which increases their desire to make a purchase (Chen et al., 2014). Studies have demonstrated that a minor price advantage can beneficially impact consumers' perceptions of value for money, even when consumers may mistakenly correlate lower costs with poorer quality (Zhang et al., 2018). However, a person's age, education, and degree of wealth can also have an impact on their sensitivity to prices (Verhoef et al., 2014). A crucial aspect of customers' OS activity is price comparison. (2018) Wang and Zhang investigated how price comparison affects customers' OS choices. Their research showed that PA had a favorable impact on the likelihood to do price comparison activities, demonstrating that reduced costs encourage people to look for better offers. PA has been associated with impulsive purchasing, notably when it emerges as cost promotions. Kim and Park (2017) looked into how price promotions affected online shoppers' impulsive purchases. Their research showed that when consumers were exposed to pricing benefits like discounts, one-time deals, and free delivery, impulse purchases were more likely to occur. Trust plays a big role in how people shop online. Liao and Chen (2019) investigated how PA affected customers' trust in online marketplaces. Their research revealed that consumers had more PI because they thought online platforms with PA were more trustworthy.

H5: PA has a significant positive impact on OSB.

H6: Consumers' PI significantly mediates the relationship between PA and OSB.

## 2.2. Perceived Risk

PR is explained by Staelin and Dowling (1994) as, the buyer's viewpoint of the ambiguity and deleterious effects of the consumption of a good or service. According to Adnan (2014) several other PR studies have highlighted that PR having negative impact on consumer OSB. Even when there is a pricing advantage, high PR may discourage customers from making transactions online (Laroche et al., 2013). The term "PR" mention to a person's subjective assessment of the risks or uncertainly connected with a particular choice or activity. Consumers PR while shopping online since things are intangible, there is no direct physical inspection, and there are doubts about the veracity and reliability of online merchants. Customers' perceptions of risk when SO are affected by a several of variables. The research has highlighted a number of factors, including product ambiguity, financial risk, information security, privacy concerns, and vendor credibility (Featherman & Pavlou, 2003; Kim et al., 2008; Liang & Huang, 1998). The correlation between PR and OSB is moderated by a number of factors. As significant moderating factors, trust, prior online buying experience, perceived product quality, website design, and reputation of the online vendor have all been discovered (Jarvenpaa et al., 2000; Liao & Cheung, 2002; Pavlou, 2003).

## 2.2.1. Product risk

According to Peter and Tarpey, Sr (1975) product risk is an insufficient potential to assess a goods. Buying online is examined perilous because, in this shopping channel, individuals can not touch the item. They can only see graphics and images. In addition, goods often appear to have greater picture quality on sites, but they are actually different. Rehman (2018) explained in the coming years, therefore, the focal point should be on product risk. In spite of this, prior studies have shown that risk of product has no impact on the conduct of OS (Bhatti et al, 2018a). Babin and Lee (2019) discovered that customers' perceptions of PR have a detrimental impact on their trust in online sellers. Similar findings were found in an investigation by Chen and Gupta (2020), which showed that shoppers with greater perceived PR have lower levels of trust, which results in a reduction in their intention to make an OP. The notion of PR by shoppers has an impact on their purchasing decisions. According to Suki and Suki (2021), consumers' perceptions of PR have a detrimental effect on both their ITB and their actual OPB. High PR may induce distrust and uncertainty; causing buyers to put off or cancel their purchases. Furthermore, shoppers' tendencies for avoidance of risk have an impact on how eager they are to invest on new or uncertain items (Chang et al., 2022). While buying a product, people are more likely to choose a well-known and reputable brand. When presented with a potentially risky product, consumers frequently conduct thorough information searches. Shoppers feel a higher level of PR when there is little or confusing product information, as indicated by Kim and Kim (2020). Consumers' perceptions of PR have an impact on their intentions to buy. PI are negatively impacted by high PR and positively impacted by low PR (Wang et al., 2019). PR can also affect customers' post-purchase actions, including as satisfaction, adherence, and word-of-mouth advertising, according to research (Featherman et al., 2016), unfavorable

post-purchase experiences brought on by PR may lead to poorer satisfaction, lowered repurchase intentions, as well as unfavorable referrals from others. Many consumers are discouraged from making online purchases because of this PR issue. It can be challenging for consumers to assess the products because of the small amount of data and higher pricing that are offered on websites (Forsythe and Shi, 2003).

### H7: PR has a negative impact on OSB.

H8: Consumers' PI significantly mediates the relationship between PR and OSB.

#### 2.2.2. Financial risk

Two kinds of hazards involved in OS are product performance and financial risk (Bhatnagar, Ghose, 2004a, 2004b). Derbaix (1983) explained financial risk is characterized as a probable cash inflow deficit. In 1997, Maignan and Lukas explained financial risk involves the sense of uncertainty of customers about the utilization credit card transactions, which have been shown to be a greatest obstacle to online transactions. In addition, in term of OS and having a bank card or pass-code stolen data compromised, financial risk applies to monetary loss. In OS and customer decision making, this hazard plays an imperative role (Bhatti et al., 2019). Previous studies have shown that FR has a major and sadistic effect on the conduct of OS (Chang et al., 2005). FR according to Popli and Mishra (2015) includes possible expenses for product repairs as well as unstated maintenance fees for online purchases. According to the study by Masoud (2013), any kind of FR, including bank card fraud, poor product quality, or unfulfilled expectations, discourages online purchasing and has a negative effect on consumers' inclinations to make purchases. According to Kim et al. (2014), consumers who perceive greater FR are less inclined to trust online shopping platforms, which results in decreased PI and higher cart turnover. Consumers who are at a significant financial risk prefer to do more research before making online purchases. Shoppers who feel greater FR are more inclined to favor safe payment methods like credit cards or PayPal over riskier ones like cash on delivery, according to Lee and Shin's research from 2019. The investigation also shown that availability of secure payment options influenced customers buying intentions favorably and reduced perceived FR. The confidentiality of shoppers' personal and financial data is frequently seen as a FR by consumers. The fears of shoppers about data safety and privacy violations affect how they SO, according to investigation by Zhou et al. (2014) and Wang et al. (2017). Trust among consumers depends on the confidentiality of OS. Studies have indicated those consumers' intentions to SO be highly influenced by their perception of transaction security, Chong et al. (2017); Smith et al., 2002. According to Bhattacherjee and Sanford (2006); Kim and co-workers (2021), FR is recognized when there is poor knowledge quality, such as inaccuracies in the description or parameters. In regarding of research, consumers' choice of products is greatly influenced by the actual level of the information. The perceived risk of receiving low- quality products significantly influences consumers' attitudes and intentions towards OS (Yin and He, 2020; Hasan et al., 2022).

H9: FR has negative impact on OSB.

H10: Consumers' PI significantly mediates the relationship between FR and OSB.

## 2.2.3. Privacy risk

PR applies, without authorization, to the revelation of private data or abuse of private information. PR in the perception of customers is at the greatest degree of risk. People avoid buying online in Pakistan. 97 percent of individuals choose to purchase COD, since when shopping online, that customers don't feel comfortable (Bhatti et al., 2019). In 1996, Davies explained there are four easy forms of secrecy. First, there is data protection; second, privacy of the body; third, privacy of communication; and fourth, territorial privacy. Some researchers have shown that the risk of privacy substantially decreases the conduct of OS (Chaudary et al., 2014). In addition, previous studies have shown that the PR has no effect on the conduct of OS (Bruseke, 2016). The association among the threat of privacy and OS necessity to be further examined in future studies (Bhatti et al., 2018). But when buying clothing online, customers must also submit more personal information, such as delivery addresses, desired sizes, and aesthetic and financial preferences (Dai et al., 2014). According to Adnan (2014), the application of privacy regulations can lower the perceived security risks of clients, increasing their propensity to make garment PO. PR strongly affect consumers' decision-making when they SO, according to numerous research. Consumers' propensity to share personal information when making a purchase is influenced by privacy concerns (Dinev et al., 2013). Consumers now deal with a variety of security threats when they transact online because to the industry's development. Fraudulent use of credit card, phishing scams, and data breaches are just a few of these risks (Johnson & Snepenger, 2019). According to studies, consumers' trust in OP platforms is negatively impacted by PR like worries about the protection of personal information, monetary loss, and privacy violations (Huang & Benyoucef, 2020). As a result, before making a purchase, shoppers could be careful, do a lot of research, and rely on internet evaluations and suggestions. Educated consumers are more likely to adopt secure behaviors, such as using strong passwords, updating software, and avoiding suspicious websites (Liu et al., 2019).

H11: PR has negative impact on OSB.

H12: Consumers' PI significantly mediates the relationship between PR and OSB.

## 3. Online shopping behavior and consumer purchase intention

Bhatti et al (2018), online uses are increasingly growing, creating favorable circumstances for customers to shop from the website without moving from their residence. Major reason why online shopping draws consumers is that they 'reoccupied in their life. People don't have a much of time in the malls to go for purchasing goods. Therefore, with a few clicks and 24/7 access during the week, they choose to shop online. Online purchasing behavior refers to the purchase of items on the internet or the method of purchasing them through the website. In addition, it is examine a dangerous way of purchasing since the seller is missing in this way of shopping. For customers, this situation is very daunting. The online method is similar as the conventional process of purchasing. It contains of 5 steps: issue identification, knowledge quest, alternative assessment, pre purchase behavior and post purchase behavior (Kotler& Keller, 2006).

The purpose of consumer purchasing is an independent procedure to purchase goods or services In the future, customer purchasing intentions are impacted by several factors that benefit from convenience and product variety, or threats such as risk of product and risk of privacy (Gregoire,2013).

The loss of intent to buy is a big issue in digital marketing and the intention to buy is a proxy for PB that needs to be examined as the intention to buy is a significant indicator of OSB (Laohapensang, 2009). Bhatti (2018), several studies have shown that there is a need to investigate the intention of customer purchasing that is uses as a mediator in OS activity. OS were divided into four separate segments by Lohse et al. (2000) depending on their behaviors: never buy dropouts, beginners, and consistent buyers. According to Kiran et al. (2008), who examined the changing patterns of OS in India, more people are becoming aware of the value of using websites to find out more information. For a variety of activities, the majority of web users still favor traditional retail, but there is a growing propensity to buy tickets, books, and music online. Convenience, time savings, curiosity, exposure to product knowledge, and the lack of competition for sales were mentioned as the top factors by OB for using the web as a means for buying, according to Zhou et al. (2007).

H13: Consumers' PI has significant impact on OSB.

## 3.1. Theory of Planned Behavior

The theory of planned behavior (TPB), which has frequently been employed to examine individual behavior and intentions in previous studies, serves as the theoretical framework for this study. TPB is a development of the theory of reasoned action (TRA), which holds that attitudes and individual preferences have an impact on people's intentions. Individual intentions for OS are also impacted by extra key aspects introduced by TPB, such as perceived behavioral control (Ajzen, 1985).



## **Figure 1: Theoretical Framework**

## 4. Research Methodology

The study's population consists of Pakistani consumers who have engaged in online purchases, selected for their relevance to the research objectives. Utilizing the criteria established by Krejcie and Morgan (1970) and Roscoe (1975), a sample size of 384 respondents was determined, with 300 participants ultimately included. Simple random sampling (SRS) was employed to ensure equal representation and minimize complexity. The research design focused on examining the mediating role of purchase intention (PI) in online shopping behavior (OSB), with hypotheses developed to explore the relationships between perceived benefits (PB), perceived risks (PR), and PI. A quantitative approach, specifically survey research, was chosen to collect data efficiently. The unit of analysis centered on individual behavior, utilizing a cross-sectional study design to capture data without manipulation. Correlation research methodology was employed due to its relevance in examining relationships without intervention. Data were collected in a natural setting, employing self-administered questionnaires distributed via various methods. Measurements encompassed demographic information and variables related to online shopping behavior, utilizing scales adapted from prior studies. SPSS was utilized for data analysis, employing multiple regression analysis to assess the mediating effect of PI. Despite efforts to reach a larger sample, practical constraints limited responses to 150 online and 150 physical questionnaires, falling within the recommended range for optimal data collection.

## 5. Data Analysis and Results

## 5.1. Preliminary analysis

The preliminary analysis encompasses several key aspects, including demographic examination, data reliability analysis, and descriptive statistics assessment.

	Table 1: Total frequencies							
	Gender Age Income Education							
N	Valid	300	300	300	300			
	Missing	0	0	0	0			

## Table 2: frequencies of gender

	Frequency	Percent	Valid Percent	Cumulative Percent
female	165	55.0	55.0	55.0
Valid male	135	45.0	45.0	100.0
Total	300	100.0	100.0	

The total numbers of respondents who fill the questionnaire are 300. Data is collected from 300 shoppers who shopped products from online stores in which 165 respondents in the study sample were females and 135 respondents in the study sample were male.

Table 3: frequencies of age					
	Frequency	Percent	Valid Percent	Cumulative Percent	
<20	15	5.0	5.0	5.0	
20-26	125	41.7	41.7	46.7	
26-30	89	29.7	29.7	76.3	
30-35	34	11.3	11.3	87.7	
35-40	37	12.3	12.3	100.0	
Total	300	100.0	100.0		

5.0% participants were between the ages of 20-26 from the total number of participants that were 300. 41.7% participants were between the ages of 20-26, and 29.7% participants were between the ages of 26-30 and 11.3% participants were between the age of 30-35, 12.3% participants were between the ages of 35-40 from the total number of participants that were 300 in the study sample.

Table 4: frequency of income					
	Frequency	Percent	Valid Percent	Cumulative	
				Percent	
15,000	2	.7	.7	.7	
30,000	42	14.0	14.0	14.7	
45,000	89	29.7	29.7	44.3	
55,000	140	46.7	46.7	91.0	
75,000>	27	9.0	9.0	100.0	
Total	300	100.0	100.0		

7% respondents having their monthly income 15,000 from the total number of participants that were 300, 14.0 % respondents having their monthly income 30,000, and 29.7% respondents having their monthly income 45,000 and 46.7% participants having their monthly income 55,000 where as it is seen that 9.0% respondents having their monthly income 75,000 from the total number of respondents that were 300 in the study sample.

		Tabl	e 5: frequency of e	ducation		
		Frequency	Percent	Valid Percent	Cumulative Percent	
	metric	21	7.0	7.0	7.0	
	intermediate	85	28.3	28.3	35.3	
Valid	graduation	127	42.3	42.3	77.7	
	master	64	21.3	21.3	99.0	
	M.Phil/PhD	3	1.0	1.0	100.0	
	Total	300	100.0	100.0		

7.0 % respondents had completed their metric degree, 28.3% were completed their intermediate degree and 42.3% had completed

Table 6: Descriptive analysis								
	N Minimum Maximum Mean Std. Deviation							
OSB	300	12.29	30.71	25.5471	5.42028			
SC	300	4.67	11.67	9.7689	2.17258			
PV	300	4.67	11.67	9.7822	2.19184			
РР	300	6.50	16.25	13.3742	2.94092			
FR	300	8.40	21.00	17.3853	3.81155			
PR	300	4.67	11.67	9.6122	2.15189			
PVR	300	7.25	16.25	11.9992	1.31519			
PI	300	8.50	16.25	12.3883	1.54098			
Valid N (list wise)	300							

their graduation degree, 21.3% had completed their master degree where as it is seen that 1.0% respondents had completed their M.Phil./PhD degree from the total numbers of respondents that were 300.

In the variable "OSB," there are 300 data points, with the lowest value being 12.29, the greatest being 30.71, and the average (mean) value being precisely 25.55. The "OSB" variable's data points have a somewhat wider range around the mean, as shown by a standard deviation of approximately 5.42. In the variable "SC," there are 300 data points, with the smallest value being 4.67, the greatest value being 11.67, and the average (mean) value being roughly 9.77. A standard deviation of roughly 2.17 indicates that the data points are not perfectly distributed around the mean. The data-set contains 300 data points for this variable, which is PV. The range of the observed value for PV is 4.67 to 11.67. The mean (average) number of products is roughly 9.78, and the standard deviation is about 2.19. The PV values appear to deviate from the mean value in a moderate way, according to the standard deviation. This variable is an example of PP. The data-set contains 300 data points once more. The minimum and greatest observed PP is 6.50 and 16.25, respectively. The standard deviation is around 2.94, while the mean PP is roughly 13.37. The greater standard deviation shows that PP is closer from the mean in distribution. This variable stands for FR. The data-set consists of 300 data points. The minimum and greatest observed FR is 8.40 and 21.00 respectively. The standard deviation is about 3.81 and the mean FR is about 17.39. Greater variability around the mean is indicated by a higher standard deviation for FR values. This field denotes PR. The data-set consists of 300 data points. The lowest PR recorded was 4.67, and the highest was 11.67. With a standard deviation of about 2.15, the mean PR is almost 9.61. The standard deviation implies that the PR values deviate from the mean in a moderate manner. This field denotes PVR. The data-set consists of 300 data points. The minimum and maximum PVR values were 7.25 and 16.25, respectively. With a standard deviation of roughly 1.32, the mean PR is roughly 12.00. Because of the lower standard deviation, PVR values are thought to be fairly near to the mean. The data-set contains 300 data points. The observed PI ranges from 8.50 to 16.25 with 8.50 being the minimum and 16.25 being the greatest. The mean PI is roughly 12.39, and the standard deviation is about 1.54. The standard deviation implies that the PI values deviate from the mean in a moderate way.

## Table 7: Reliability of OSB

Cronbach's Alpha	N of Items
.968	7

As the value of CA has shown in the table is .968, which is greater than standard value that is 0.7. So here we concluded that, the results have shown in the above table the scale that is used in reliability statistics for the measurement of dependent variable that is OSB was reliable.

	Fable 8: Reliability SC	
Cronbach's Alpha	N of Items	
.928	3	

As the value of CA that is shows in the above table is .928, which is greater than standard value that is 0.7. So here we concluded the results from the above table shows that the scale used for the measurement of SC was reliable.

### Table 9: Reliability of PV

	<i>.</i>
Cronbach's Alpha	N of Items
.940	3

As the value of CA that is shows in the above table is .940, which is greater than standard value that is 0.7. So here we concluded

the results from the above table shows that the scale used in statistics for the measurement of SC was reliable.

Table 10: Reliability of PP			
Cronbach's Alpha	N of Items		
.953	4		

As the value of CA that is shows in the above table is .953, which is greater than standard value that is 0.7. So here we concluded the results from the above table indicate that the scale used for the measurement of PP was reliable.

	Table 11: Reliability of FR	
Cronbach's Alpha	N of Items	
.961	5	

As the value of CA that is shows in the above table is .961, which is greater than standard value that is 0.7. So here we concluded the results from the above table indicate that the scale used for the measurement of FR was reliable.

	Table 12: Reliability of PR	
Cronbach's Alpha	N of Items	
.930	3	

As the value of CA that is showed in the above table is .930, since this is greater than standard value that is 0.7. So here we concluded the results from the above table indicate that the scale used for the measurement of PR seems to be reliable.

Table 13: Reliability of PVR							
Cronbach's Alpha	N of Items						
.742	4						

The CA value is .742 that is slightly greater than standard value i.e.0.7. So the above table value indicates that the scale was uses for the measurement of the PVR seem to be reliable.

Table 14: Reliability PI							
Cronbach's Alpha	N of Items						
.802	4						

As the value of CA that is shows in the above table is .802, which is greater than standard value that is 0.7. So here we concluded the results from the above table indicate that the scale used for the measurement of PI was reliable. 5.1. Hypothesis testing through Mediation analysis

#### Summary \*\*\*\*\*\* Model = 4Y = OSBX = SCM = PISample size 300 Mediating impact through purchase intention \*\*\*\*\* Outcome: PI Model Summary R R-sq MSE F df1 df2 р .7582 .5749 1.0128 403.0418 1.0000 298.0000 .0000

Model							
	coeff	se	t	р	LLCI	ULCI	
Constan	t 7.1346	.268	31	26.6150	.0000	6.6070	7.6621
SC	.5378	.0268	20	0.0759	.0000	.4851	.5905

The aforementioned findings underscore the influence of shopping convenience (SC) through the mediating variable PI. The model's fitness is confirmed by a significantly low P-value of .0000, which is below the conventional threshold of 0.05. This underscores the substantial positive impact of shopping convenience (SC), as evidenced by its P-value of .0000, indicating significance. Additionally, the t-value surpasses the threshold of 1.96, reaching 20.0759. Analysis of the LLCI and ULCI reveals that both values are positive and not equal to zero, suggesting a significant impact of the independent variable (SC) through the mediator.

Mediating impact of purchase intention ************************************
Outcome: OSB
Model Summary
R R-sq MSE F df1 df2 p
.9229 .8518 4.3827 853.6655 2.0000 297.0000 .0000
Model
coeff se t p LLCI ULCI
Constant .3766 1.0248 .3675 .0000 1.6402 2.3933
PI .3846 .1205 3.1914 .0000 .1474 .6217
SC 2.0889 .0855 24.4395 .0000 1.9207 2.2571
**************************************

The preceding outcomes of the total effect model reveal the combined influences of the independent variable, Shopping convenience (SC), and the mediating variable, PI, on the dependent variable, OSB. The model's adequacy is affirmed by a remarkably low P-value of .0000, falling below the customary threshold of 0.05. Notably, Shopping convenience demonstrates a significant positive impact, as indicated by its P-value of .0000, which is below the 0.05 threshold. Moreover, both variables exhibit t-values exceeding 1.96 (PI=3.1914 and SC=24.4395), further supporting their significance. Analysis of the LLCI and ULCI reveals non-zero and positive values, indicating a meaningful impact of Shopping convenience (SC) and PI on OSB.

Direct and indirect im	pact	***				***	
Total effect of X on Y	· · · · · · · · · · · · · · · · · · ·		I O I AL, DIREC	I, AND INDIRECT I	EFFECTS		
Effect	SE	t	р	LLCI	ULCI		
2.2957	.0566	40.5758	.0000	2.1844	2.4071		
Direct effect of X on Y	Y						
Effect	SE	t	р	LLCI	ULCI		
2.0889	.0855	24.4395	.0000	1.9207	2.2571		
Indirect effect of X on	ı Y						
Effect Boo	t SE BootLLC	I BootULCI PI	.2068	.1692 .3715			
.3414							
Normal theory tests for	or indirect effe	ct					
Effect	se	Z	р				
.2068	.1657	3.1481	.0000				
*****	******	*****	****	*****	**********	*****	**

The above provided results of direct and indirect effect model shows the exclusive effect of shopping convenience (SC) on consumer OSB. This impact is significant because the significance p-value (.0000) was lesser than threshold or standardized p-value (0.05). Conversely, the mediated effect of SC on OSB through PI proved to be significant, as evidenced by the positive values of BootLLCI and BootULCI. Thus, it can be inferred that PI serves as a mediator in the relationship between SC and OSB. Additionally, all three hypotheses were validated based on these findings.

## 5.3. Hypothesis

Hypothesis 1: Shopping convenience has **significant positive** impact on consumer purchase intention. (Accepted) Hypothesis 2: Purchase intention has **significant impact** on consumer OSB. (Accepted) Hypothesis 3: Purchase intention **mediates the relationship** between SC and IBB. (Accepted) Summary

Model = 4Y = OSBX = PVM = PISample size 300 Mediating impact through purchase intention Outcome: PI Model Summary F df1 R MSE df2 R-sq p .7504 .5630 1.0000 298.0000 .0000 1.0411 383.9946 Model coeff LLCI ULCI se t p 7.2278 26.7834 .0000 6.6967 7.7588 Constant .2699 .0000 PV .5275 19.5958 .4746 .5805 .0269

The aforementioned findings illustrate the influence of product variety (PV) through the mediating variable PI. The model's adequacy is confirmed by the remarkably low P-value of .0000, surpassing the standard threshold of 0.05. Product variety demonstrates a significant positive impact, supported by its P-value of .0000, which is below the 0.05 threshold. Moreover, the t-value exceeds 1.96, reaching 19.5958. Analysis of the LLCI and ULCI indicates non-zero and positive values, suggesting a meaningful impact of the independent variable (PV) through the mediator (PI).

Mediating impact of purchase intention Outcome: OSB Model Summary df2 F df1 R R-sq MSE .9197 4.5595 814.8048 2.0000 297.0000 .0000 .8458 Model coeff LLCI **ULCI** se t р .0699 1.9787 Constant .0729 1.0425 .0000 2.1244 PI .4600 .1212 3.7941 .0002 .2214 .6985 ΡV 2.0216 .0852 23.7194 .0000 1.8539 2.1894 

The preceding results from the total effect model illustrate the combined influences of both the independent variable, product variety (PV), and the mediating variable, PI, on the dependent variable OSB. The model's fitness is substantiated by the significant P-value (.0000), which falls below the standard threshold of 0.05. Notably, product variety exhibits a positive and significant impact, supported by its P-value (.0000) being below the 0.05 threshold, for both the independent and mediating variables. Moreover, the t-values for both independent and mediating variables exceed 1.96 (PI=3.7941 and PV=21.5048), further validating their significance. Analysis of the LLCI and ULCI reveals non-zero and positive values for both the independent and mediating variables, indicating a meaningful impact on OSB. Consequently, it can be inferred that both product variety (PV) and PI have a positive effect on OSB.

Direct effect of X on Y Effect SE LLCI ULCI t р 2.0216 .0852 23.7194 .0000 1.8539 2.1894 Indirect effect of X on Y Effect Boot SE BootLLCI BootULCI PI .2427 .0634 .1198 .3705 Normal theory tests for indirect effect Ζ Effect se p .2427 .0652 3.7203 .0002

The above provided results of direct and indirect effect model show the exclusive effect of product variety (PV) on consumer OSB. This impact is significant because the significance p-value (.0000) was lesser than standardized p-value (0.05). Conversely, the mediated effect of PV on OSB through PI, acting as the mediating factor, proved to be significant, as evidenced by the positive values of BootLLCI and BootULCI. As a result, it was deduced that PI mediates the relationship between PV and OSB, thus confirming the acceptance of all three hypotheses.

#### 5.4. Hypothesis

Model Summary R R-sq MSE F df1 df2 p .7685 .5907 .9753 430.0076 1.0000 298.0000 .0000

Model

LLCI ULCI coeff se t p 7.0025 .2659 26.3344 .0000 6.4792 7.5258 Constant PP .4027 .0194 20.7366 .0000 .3645 .4409

The provided information highlights the influence of product price (PP) through the mediating variable PI. The model's validity is established by the significantly low P-value of .0000, indicating its superiority over the standard threshold of 0.05. Notably, product price exhibits a noteworthy positive impact, as indicated by its P-value (.0000), which is below the standard threshold of 0.05. Moreover, the t-value surpasses 1.96, reaching 19.9438. Analysis of the LLCI and ULCI reveals non-zero and positive values, suggesting a positive and significant impact of the independent variable PP through the mediator PI.

Mediating impact of PI Outcome: OSB Model Summary R MSE F df1 df2 R-sq 2.0000 297.0000 .0000 .9262 .8579 4.2029 896.5377 Model coeff LLCI ULCI se t p

.7331 Constant .7382 1.0069 .0000 1.2434 2.7197 PI .1203 .0004 .2877 2.3923 .0510 .5243 PP 1.5885 .0630 25.2100 .0000 1.4645 1.7125 

The above providing consequence of total effect model demonstrates the impacts of both independent variables that are product price (PP) and the mediating variable that is PI on the dependent variable OSB. Fitness of model has been proven as the significance P- value (.0000) which is less than standard P-value (0.05). Product price positively impacted which is also notable because the significant P-value (.0000) lesser than standard P-value (0.05) for both the independent and mediating variables. Furthermore, t- value is also greater than for both independent and mediating variables from 1.96 that is (PI=2 .3923 and PP=25.2100) with the value of lower level confidence interval and upper level confidence interval which is not zero and also positive for independent variable as well as for mediating variable. Consequently, it can demonstrate that a product price (PP) and PI has positive effect on OSB.

Direct and indirect impact model

Total effect of X on Y Effect SE LLCI t ULCI р 1.7044 .0406 41.9460 .0000 1.6244 1.7843 Direct effect of X on Y Effect LLCI ULCI SE t р 1.5885 .0630 25.2100 .0000 1.4645 1.7125 Indirect effect of X on Y Effect Boot SE BootLLCI BootULCI PI .1159 .0479 .2252 .2146

Normal theory tests for indirect effect

Effect se Z p .1159 .1488 2.3738 .00004

The results shown above of direct and indirect effect model demonstrates the exclusive effect of product price (PP) on consumer OSB. This impact is significant because the significance p-value (.0000) was lesser than standardized p-value (0.05). However, as seen by the positive BootLLCI and BootULCI values, the indirect effect of PP on OSB via the PI as the mediating impact seemed noteworthy. Thus, it was determined that purchase intention acted as a mediator in the association between product price and online purchasing behavior and also concluded that all three hypotheses were accepted.

#### 5.5. Hypothesis

Hypothesis 7: Product price have **significant positive** impact on consumer purchase intention. (**Accepted**) Hypothesis 8: Purchase intention has **significant** impact on consumer OSB. (**Accepted**) Hypothesis 9: Purchase intention **mediates the relationship** between product price and OSB. (**Accepted**)

Summary

Model = 4Y = OSBX = FRM = PISample size 300 ..... Mediating impact through PI Outcome: PI Model Summary R R-sq F df1 df2 MSE p .9947 415.7881 1.0000 298.0000 .7632 .5825 .0000

Model coeff LLCI ULCI р se t 6.4938 Constant 7.0238 .2693 26.0808 .0000 7.5538 FR .3086 .0151 20.3909 .0000 .2788 .3383

The data presented above elucidates the influence of financial risk (FR) through the mediating variable PI. The model's robustness is evidenced by the remarkably low P-value of .0000, indicating its superiority over the standardized threshold of 0.05. Notably, financial risk demonstrates a substantial negative impact, as underscored by its significant P-value (.0000), falling below the standard threshold of 0.05. Additionally, the t-value exceeds 1.96, reaching 20.3909. A substantial positive influence of the independent variable FR through the mediator PI is suggested by the non-zero and positive values found in the LLCI and ULCI analyses.

Mediating impact of PI Outcome: OSB Model Summary R F df1 R-sq MSE df2 p .9158 4.7708 772.1430 2.0000 297.0000 .0000 .8387 Model coeff LLCI ULCI se t р .1579 Constant .0000 1.9342 2.2717 .1688 1.0686 PI .4000 .1269 3.1533 .0001 .1504 .6497 FR 1.1747 .0513 22.9029 .0000 1.0738 1.2756 

The entire model's aforesaid consequences show how financial risk (FR), an independent variable, and principal indicator (PI), a mediating variable, affect the dependent variable OSB. The significant P-value (.0000), which is less than the standardized P-value (0.05), indicates that the model is fit. Because the significance P-value (.0000) for financial risk was lower than the standard P-value (0.05) for both the independent and mediating variables, financial risk has a negative impact that is likewise significant. Additionally, the t-value is higher than 1.96 for the independent and mediating variables (PI=3.1533, FR=22.9029), with the LLCI and ULCI values being not equal to zero and favorable for both the independent and mediating variables. Consequently, it can demonstrate that financial risk (FR) have negative but PI has significantly positive impact on OSB.

Direct and indirect impact model

Total effect of X on Y Effect SE LLCI ULCI t р 1.2981 .0336 38.5958 .0000 1.2319 1.3643 Direct effect of X on Y Effect SE LLCI ULCI t р 1.1747 .0513 22.9029 .0000 1.0738 1.2756 Indirect effect of X on Y Effect Boot SE BootLLCI BootULCI .1234 .0377 .2547 PI 2013 Normal theory tests for indirect effect Effect Ζ se p .1234 .0001 .0397 3.1126

The results shown above of direct and indirect effect model demonstrates the exclusive effect of financial risk (FR) on consumer OSB. This impact is significant because the significance p-value (.0000) was lesser than standardized p-value (0.05). Conversely, the BootLLCI and BootULCI values, which were both positive, indicated that the indirect impact of FR on OSB through the PI

was acknowledged as the mediating impact was significantly positive. Thus, it was determined that PI was mediating the connection between FR and OSB in this instance, and it was also determined that all three hypotheses were appropriate.

### 5.6. Hypothesis

Hypothesis 10: Financial risk has significant negative impact on consumer purchase intention. (Accepted)

Hypothesis 11: Purchase intention has significant **positive** impact on consumer online shipping behavior. (Accepted) Hypothesis 12: Purchase intention **mediates** the relationship between financial risk and online shopping behavior. (Accepted) Summary

\*\*\*\*\*\* Model = 4Y = OSBX = PRM = PISample size 300 Mediating impact through PI \*\*\*\*\* Outcome: PI Model Summary MSE F df1 R R-sq df2 p .7591 .5762 1.0098 405.1016 1.0000 298.0000 .0000 Model coeff LLCI ULCI se t р 6.6400 Constant 7.1635 .2660 26.9307 .0000 7.6870 PR .5436 .0270 20.1271 .0000 .5967 .4904 The information above shows how the mediating variable, PI, affects product risk (PR). The significantly low P-value of 0000, which is below the conventional threshold of 0.05, confirms the fitness of the model. The product risk exhibits a statistically significant negative impact, as indicated by its significant P-value of 0000, which is less than the conventional threshold of 0.05. Furthermore, the t-value rises to 20.1271, above 1.96. Something other than zero and positive values are found in the LLCI and ULCI evaluations, suggesting a significant impact of the independent variable PR via the mediator PI. Mediating impact of PI Outcome: OSB Model Summary MSE F df1 R R-sq df2 .9011 .8120 5.5613 641.2826 2.0000 297.0000 .0000Model coeff LLCI ULCI se t p Constant .0368 1.1567 .0318 .0000 2.2396 2.3132 .0001 .8015 PI .5339 .1359 3.9276 .2664 PR .0000 1.9658 .0973 20.1933 1.7742 2.1574

Total effect of X on Y
Effect SE t p LLCI ULCI
2.2560 .0649 34.7653 .0000 2.1283 2.3837
Direct effect of X on Y
Effect SE t p LLCI ULCI
1.9658 .0973 20.1933 .0000 1.7742 2.1574
Indirect effect of X on Y
Effect Boot SE BootLLCI BootULCI
PI .2902 .0702 .1575 .4327
Normal theory tests for indirect effect
Effect se Z p
.2902 .0754 3.8503 .0001
***************************************

The results shown above of direct and indirect effect model demonstrates the exclusive effect of product risk (PR) on consumer OSB. This impact is significant because the significance p-value (.0000) was lesser than standardized p-value (0.05). However, while the BootLLCI and BootULCI values both showed that they were positive, the indirect impact of PR on OSB through the PI as the mediating impact was noteworthy. As a result, it was determined that PI was mediating the association between OSB and product risk and that all three hypotheses were valid.

#### 5.7. Hypothesis

Hypothesis 13: Product risk has significant **negative** impact on consumer purchase intention. (**Accepted**) Hypothesis 14: Purchase intention has significant **positive** impact on consumer online shipping behavior. (**Accepted**) Hypothesis 15: Purchase intention **mediates** the relationship between Product risk and online shopping behavior. (**Accepted**) Summary

Model = 4Y = OSBX = PVRM = PISample size 300 Mediating impact through PI \*\*\*\*\* Outcome: PI Model Summary R R-sq MSE F df1 df2 p .4741 .2248 1.8471 86.3955 1.0000 298.0000 .0000 Model coeff LLCI ULCI se p t 5.7231 7.9337 4.3035 Constant .7214 .0000 7.1427 **PVR** 9.2949 .4379 .5555 .0598 .0000 .6731

The data shown here demonstrates how the mediating variable PI affects privacy risk (PVR). The significant P-value of 0.000 was smaller compared to the conventional P-value of 0.05, demonstrating the model's fitness. Because the significance P-value (.0132) is lower than the normal P-value of 0.05, privacy risk has a substantial negative impact. Additionally, the t-value, or 9.2949, is much higher than 1.96. Given that the LLCI and ULCI values are positive as well as do not equal zero, it may be concluded that the independent variable PVR has a large and positive impact on the mediator PI.

Mediating impact of PI

\*\*\*\*\*\*

Outcome: OSB

Model Summary

]	R R-sq	MSE	Fu	lf1 d	f2 p								
.79	.6265	5 11.0482	249.0493	2.000	0 297.00	0000. 00							
Model													
	coeff	se t	р	LLCI	ULCI								
Consta	ant 15.694	9 1.9416	8.0833	.0000	19.5161	11.8738							
PI	2.1072	.1417 14	4.8734 .	0000 1	.8284 2	.3860							
PVR	1.2615	.1660	7.5997	.0000	.9349	1.5882							
*****	******	********	*******	******	*******	****** TOT	'AL EF	FECT N	MODEL	*****	*****	******	*****

The above providing outcome of total effect model demonstrates the impacts of both independent variables that are privacy risk (PVR) and the mediating variable that is PI on the dependent variable OSB. Fitness of model has been proven as the significance P-value (.0000) which is less than standardized P-value (0.05). Because the significance P-value (.0000) was lower than the conventional P-value (0.05) for each of the independent and mediating variables, privacy risk exerts a negative impact that is also significant. Furthermore, t- value is also greater than for both independent and mediating variables from 1.96 that is (PI=14.8734 and PVR=-7.5997) with the value of LLCI and ULCI which is more than zero and also positive for independent variable as well as for mediating variable. Consequently, it can demonstrate that privacy risk (PVR) have negative but PI has positive effect on OSB. So, here it is concluded PVR has negative impact on OSB and PI mediate the relationship between IV and DV variable.

Direct and indirect effect model

Total effect of X on Y Effect SE LLCI ULCI t р .0000 2.0527 2.8113 .1927 12.6183 2.4320 Direct effect of X on Y Effect SE LLCI ULCI t р 1.2615 .1660 7.5997 .0000 1.5882 .9349 Indirect effect of X on Y Effect Boot SE BootLLCI BootULCI PI 1.1705 .2101 .7662 1.5898 Normal theory tests for indirect effect Effect Ζ se р 1.1705 7.8695 .0000 .1487 

The results shown above of direct and indirect effect model demonstrates the exclusively negative effect of privacy risk (PVR) on OSB. This impact is significant because the significance p-value (.0000) was lesser than standardized p-value (0.05). Conversely, the BootLLCI and BootULCI values, which were equally positive, demonstrate the favorable and large indirect impact of PVR on OSB through the PI as the mediating impact. As a result, it was determined that PI mediates the association between OSB and privacy risk and that all three hypotheses were accepted.

### 5.8. Hypothesis

Hypothesis 16: Privacy risk has significant **negative** impact on consumer purchase intention. (**Accepted**) Hypothesis 17: Purchase intention has significant **positive** impact on consumer online shipping behavior. (**Accepted**) Hypothesis 18: Purchase intention **mediates** the relationship between Privacy risk and online shopping behavior. (**Accepted**)

#### 6. Discussion

The primary aim of this research is to explore the impact of perceived benefits and risks on online shopping behavior, with consumer purchase intention acting as a mediating factor. Adopting a cross-sectional and quantitative approach, this study corroborates earlier findings indicating the significance of convenience, price advantage and product variety in influencing online purchasing habits (Rehman, 2018; Adnan, 2014). Additionally, it supports previous research highlighting the adverse effects of product risk, financial risk and privacy risks on online shopping behavior (Bhatti et al., 2018, 2020). Furthermore, it confirms the critical role of consumer purchase intention, consistent with the Theory of Planned Behavior proposed by Ajzen (1991), in driving online buying behavior. The study underscores the importance of understanding these factors for devising effective marketing strategies and enhancing online shopping experiences to meet consumer needs.

### 6.1. Practical implications of study

Marketing professionals can enhance online marketing strategies by understanding factors influencing consumer purchase intention. Emphasizing perceived benefits and minimizing perceived risks can increase purchase intent and conversion rates. Brief,

compelling product descriptions and positive reviews can enhance buyer perceptions, while ensuring secure payment methods and transparent policies can build customer trust. Addressing specific perceived risks like product quality and delivery issues through assurances and easy return procedures can further boost purchase intent. Pricing strategies, user experience improvements, and customization based on consumer segments can also impact purchase intention positively. Leveraging social proof and providing proactive customer service can further mitigate concerns and foster trust, ultimately leading to more successful online transactions. Businesses should consider factors such as tactile product experience, vendor trust, and customer preferences to optimize their online presence and attract and retain customers effectively. Overall, understanding the interplay between perceived benefits, risks, and purchase intention can guide businesses in creating impactful marketing campaigns and improving the online shopping experience, ultimately driving growth and success.

## 6.2. Limitations & future research directions

This study has limitations stemming from its cross-sectional design, potentially making it vulnerable to changes in respondents' evaluative standards over time and limiting its ability to capture actual shopping behavior. Factors such as service quality, product delivery, and security risks associated with online transactions could influence online buyers' behavior, potentially altering their shopping patterns and impacting the data collected. Additionally, the voluntary sample technique used may have introduced bias into the responses, with respondents potentially influenced by companions during fieldwork. The rushed nature of shopping may have led to vague responses, contributing to potential errors in the data. The study primarily focused on online shoppers' purchasing intentions rather than their actual behaviors, providing only limited information on consumer behavior. Future research could address these limitations by broadening investigations to include different regions, exploring additional aspects such as convenience and risk, and examining the role of attitudes and trust as mediators. Moreover, future studies could delve into specific product categories and incorporate both cross-sectional and longitudinal approaches to ensure comprehensive analysis and validation of results, ultimately enhancing the study's validity and dependability.

## 7. Conclusions

Three perceived benefits and three perceived risks were found during the research examination of consumer internet shopping behavior. This study adds to the body of knowledge and literature already available on e-commerce. In the context of globalization, understanding online shopping behavior becomes essential as businesses work to draw and keep customers both offline and online. However, there is no literature or research on online purchasing in Pakistan, which presents a problem for academics and researchers. The study's conclusions have important ramifications for academics and business people who want to improve customers' online shopping behavior by reducing risks and maximizing benefits compared to offline shopping. Three perceived benefits— convenience, price and product variety—as well as three perceived risks—product risk, financial and privacy risk—were the main points of discussion. In the end, the study emphasizes the significance of addressing product risks and privacy concerns to make sure consumers feel safe and secure while making purchases or paying bills online. Businesses may promote a great online shopping experience and help in the expansion of e-commerce in the area by solving these issues.

#### References

- Adnan, H. (2014). An analysis of the factors affecting online purchasing behavior of Pakistani consumers. *International Journal of Marketing Studies*, 6(5), 133.
- Adnan, M. (2014). The impact of perceived benefits and risks on online purchase intention in Malaysia. *International Journal of Marketing Studies*, 6(5), 1–18.
- Ahmed, Z., Su, L., Rafique, K., Khan, S. Z., &Jamil, S. (2018). A Study on the Factors Affecting Consumer Buying Behavior towards Online Shopping in Pakistan. *Journal of Asian Business Strategy*, 7(2), 44-56.
- Aijaz, H., & Butt, F. S. (2009). Barriers in the development of electronic commerce: Study of Pakistani environment[Masters Thesis]. Jönköping International Business School, Jönköping University.
- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211.
- Ajzen, I., &Fishbein.(1980). Understanding attitudes and predicting social behavior. PrenticeHall.
- Almousa, M. (2011). Perceived risk in apparel online shopping: A multi dimensional perspective/LE risque PER£U dansdes Achats En Ligne D'habillement: Une Perspective De Dimensionnelle Multiple. *Canadian Social Science*, 7(2), 23.
- Almousa, M. (2014). The influence of risk perception in online purchasing behavior: Examination of an early-stage online market. *International Review of Management and Business Research*, 3(2), 779.
- Amin, S., &Mahasan, S. (2014). Relationship between consumers per-ceived risks and consumer trust: A study of Sainsbury store. *Middle East Journal of Scientific Research*, 19(19), 647–655.
- Ariff, M. S. M., Sylvester, M., Zakuan, N., Ismail, K., & Ali, K. M. (2014). Consumer perceived risk, attitude, and onlineshoppingbehaviour; empirical evidence from Malaysia. *Materials Science and Engineering*. Paper presented at the IOP Conference Series.
- Arshad, A., Zafar, M., Fatima, I., & Khan, S. K. (2015). The impact of perceived risk online buying behavior. *International Journal of New Technology and Research*, 1(8), 1318.
- Babin, B. J., &Attaway, J. S. (2000). Atmospheric affect as a tool for creating value and gaining share of customer. Journal of Business Research, 49(2), 91-99.
- Babin, B. J., & Lee, K. (2019). The effects of perceived risk on e-commerce: comparison of online versus offline transactions. Journal of Business Research, 98, 494-502.
- Bashir, D. R., Mehboob, I., &Bhatti, W. K. (2015). Effects of online shopping trends on consumer-buying behavior: An empirical study of Pakistan [Masters Thesis]. *Journal of Management and Research*, 2(2), 1–24.

- Bauer, R. A. (1960). *Consumer behavior as risk taking*. Paper presented at the Proceedings of the 43rd National Conference of the American Marketing Association. Chicago, IL.
- Bhatnagar, A., &Ghose, S. (2004). Segmenting consumer markets based on benefit seeking, usage occasions, and individual characteristics. Journal of Consumer Marketing, 21(4), 276-287.
- Bhattacherjee, A., & Sanford, C. (2006). Influence processes for information technology acceptance: An elaboration likelihood model. MIS Quarterly, 30(4), 805-825.
- Bhatti, A. (2018). Consumer purchase intention effect on online shopping behavior with the moderating role of attitude. *International Journal of Academic Management Science Research (IJAMSR)*, 2(7), 44–50.
- Bhatti, A. (2018c). Sales promotion and price discount effect on consumer purchase intention with the moderating role of social media in Pakistan. *International Journal of Business and Management*, 3(4), 50–58.
- Bhatti, A., & Ur Rehman, S. (2019). Impact of Social risk, Government and Psychological Factors with Moderator Cultural Factors on Online Shopping Behavior in Pakistan. *Pakistan Journal of Humanities and Social Sciences*, 7(1), 31–44.
- Bhatti, A., & Ur Rehman, S. (2020). Perceived benefits and perceived risks effect on onlines hopping behavior with the mediating role of consumer purchase intention in Pakistan. *International Journal of Management Studies*, 26(1), 33–54.
- Bhatti, A., &Shafique Ur Rehman. (2019). The influence of risks on online shopping behavior in Pakistan. *International Journal of Innovation, Creativity and Change*. http://www.ijicc.net, *10*(9).
- Bhatti, A., Saad, S., &Gbadebo, S. M. (2018). Convenience risk, product risk, and perceived risk influence on online shopping: Moderating effect of attitude. Science Arena Publications. *International Journal of Business and Management*, 3(2), 1–11.
- Bhatti, A., Saad, S., &Gbadebo, S. M. (2018b). The effect of financial risk and convenience risk on online shopping behavior with the moderating role of trust. *International Journal of Academic Management Science Research*, 2(8), 38–42.
- Bhatti, A., Saad, S., & Gbadebo, S. M. (2020). Moderator trust, subjective norms influence risk and online shopping behavior of consumers. *International Journal of Scientific Engineering and Technology Research*, 9(1), 627–664.
- Bhatti, M. A., Saad, N. M., &Gbadebo, S. A. (2018). Determinants of online shopping behavior: The mediating role of purchase intention. *Journal of Internet Banking and Commerce*, 23(2), 1–15.
- Bhatti, M. A., Saad, N. M., &Gbadebo, S. A. (2020). Factors influencing online shopping behavior: The mediating role of purchase intention. *International Journal of Electronic Commerce Studies*, 11(1), 17–32.
- Brüseke, L. (2016). The influence of privacy perceptions on online shopping behavior: a comparison between millennials and baby boomers. University of Twente.
- Chang, H. H., Liao, S. H., & Wang, W. Y. (2022). Antecedents and consequences of consumer perceived risk in mobile commerce. Internet Research, 32(1), 229-254.
- Chaudary, S., Rehman, M. A., & Nisar, S. (2014). Factors influencing the acceptance of online shopping in pakistan.
- Chen, Y. J., & Chang, Y. C. (2020). A study of online shopping intention based on convenience factors. In *Proceedings of the 2020* International Conference on Orange Technologies (ICOT)(pp. 28–33).
- Chen, Y., Fay, S., & Wang, Q. (2014). The role of marketing in social media: How online consumer reviews evolve. *Journal of Interactive Marketing*, 28(3), 134–146.
- Chiu, C. M., Chang, C. C., Cheng, H. L., & Fang, Y. H. (2014). Determinants of satisfaction and continuance intention towards self-service technologies. *Industrial Management and Data Systems*, 114(8), 1317–1337.
- Choi, J., & Kim, Y. (2019). The impact of perceived product variety on consumer responses in an online shopping context. *Journal* of *Retailing and Consumer Services*, 48, 192–200.
- Chong, A. Y. L., Ooi, K. B., Lin, B., &Bao, H. (2017). Understanding customers' intention to shop online: An integrative model incorporating trust, perceived benefits, and perceived risk. International Journal of Information Management, 37(3), 209-219.
- Dai, B., Forsythe, S. and Kwon, W.S. (2014), "The impact of online shopping experience on risk perceptions and online purchase intentions: does product category matter", Journal of Electronic Commerce Research, Vol. 15 No. 1, pp. 13-24.
- Dinev, T., Bellotto, M., Hart, P., Russo, V., & Serra, I. (2013). Privacy calculus model in e-commerce—a study of Italy and the United States. Information & Management, 50(5), 1-12.
- Dost, B., Khyzer, M., Illyas, M., & Abdul Rehman, C. (2015). Online shopping trends and its effects on consumer buying behavior: A case study of young generation of Pakistan. NG-Journal of Social Development, 417(3868), 1–22
- Featherman, M. S., &Pavlou, P. A. (2003).Predicting e-services adoption: A perceived risk facets perspective. International Journal of Human-Computer Studies, 59(4), 451-474.
- Featherman, M. S., et al. (2016). Trust, satisfaction, and online repurchase intention: The moderating role of perceived effectiveness of e-commerce institutional mechanisms. MIS Quarterly, 40(1), 881-110.
- Forsythe, S. and Shi, B. (2003), "Consumer patronage and risk perceptions in internet shopping", Journal of Business Research, Vol. 56 No. 11, pp. 867-875.
- Grewal, D., Monroe, K. B., & Krishnan, R. (2014). The effects of price-comparison advertising on buyers' perceptions of acquisition value, transaction value, and behavioral intentions. *Journal of Marketing*, 73(6), 105–114.
- Hasan, M., Sadiq, T., Ali, M. N., Asghar, M., & Mohsin, M. (2022). Consumer purchase intention in online retail: The role of perceived risk, satisfaction, and trust. Journal of Retailing and Consumer Services, 67, 102731.
- Iyengar, S. S., &Lepper, M. R. (2000). When choice is demotivating: Can one desire too much of a good thing? Journal of Personality and Social Psychology, 79(6), 995-1006.
- Jiang, L., Yang, Z., Jun, M., & Ni, J. (2016). The impact of social media reviews on restaurant sales performance: The moderating role of excellence award. *International Journal of Hospitality Management*, 53, 30–40.

- Jiang, L., Yang, Z., Jun, M., & Wang, X. (2015). The impact of social media reviews on restaurant performance: The mediating role of price premium. *International Journal of Hospitality Management*, 47, 77–87.
- Johnson, R. D., & Snepenger, D. J. (2019). E-commerce website security and trustworthiness: A study of user perceptions. Journal of Computer Information Systems, 59(2), 137-146.
- Kim, D. J., Ferrin, D. L., &Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. Decision Support Systems, 44(2), 544-564.
- Kim, D. J., Ferrin, D. L., &Rao, H. R. (2014). Trust and satisfaction, two stepping stones for successful e-commerce relationships: A longitudinal exploration. Information Systems Research, 25(3), 630-655.
- Kim, D., & Ammeter, A. P. (2018). Shifts in online consumer behavior: A preliminary investigation of the net generation. Journal of Theoretical and Applied Electronic Commerce Research, 13(1), 1–25.
- Kim, M., Lee, J. S., & Tao, W. (2021). Effects of online product presentation on consumers' risk perception, trust, and purchase intention: Focusing on products with low brand familiarity. Journal of Retailing and Consumer Services, 59, 102413.
- Kim, Y., & Kim, J. H. (2020). Investigating antecedents of perceived risk in online shopping: A moderating role of perceived product scarcity. Sustainability, 12(21), 9025.
- Kim, Y., Park, J., & Foreman, A. M. (2017). The influence of product risk on trust in online travel products: Social mediagenerated information as a mediator. *Journal of Travel Research*, 56(5), 651–662.
- Kuo, Y. F., Wu, C. M., & Deng, W. J. (2012). The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value- added services. *Computers in Human Behavior*, 28(3), 887–896.
- Laohapensang, W. (2009). Factors influencing consumer online shopping attitudes and behavior: The case of Thai consumers. Journal of Promotion Management, 15(3), 329-354.
- Laroche, M., Habibi, M. R., & Richard, M. O. (2013). To be or not to be in social media: How brand loyalty is affected by social media? International Journal of Information Management, 33(1), 76-82.
- Lee, J., & Park, D. H. (2020). The effects of perceived risk on online purchase intention: The mitigating role of product variety. *Journal of Research in Interactive Marketing*, 14(4), 437–454.
- Lee, J., & Shin, D. (2019). Risk perceptions and online payment method choice: Examining the moderating effects of individual differences. *Journal of Electronic Commerce Research*, 20(3), 230–249.
- Li, M., & Zhang, Z. (2019). Factors influencing online shopping behavior: The mediating role of purchase intention. *Journal of Research in Interactive Marketing*, 13(2), 226–245.
- Liang, H., & Huang, J. (1998). An empirical study on consumer acceptance of products in electronic markets: A transaction cost model. Decision Support Systems, 24(1), 29-43.
- Liang, T. P., & Huang, J. S. (2015). The role of personalization in online auction market. *Computers in Human Behavior*, 52, 254–264.
- Liang, Y., & Huang, J. (2019). E-commerce pricing: How price frames affect purchase intention in online shopping. *Journal of Retailing and Consumer Services*, 50, 314–320.
- Liao, C., & Chen, J. (2019). The influence of price advantage on trust and purchase intention in online shopping platforms. *Information Systems and e-Business Management*, 17(1), 1–25.
- Liao, Z., & Cheung, M. T. (2002). Internet-based e-shopping and consumer attitudes: An empirical study. Information & Management, 39(9), 727-739.
- Liebana-Cabanillas, F. et al. (2017). Influence of online reviews on customers' outcomes: A systematic review. *Frontiers in Psychology*, 8, 1–14.
- Liebana-Cabanillas, F., Sanchez-Fernandez, J., & Munoz-Leiva, F. (2019). Antecedents and consequences of perceived value in online shopping: Empirical evidence from the UK and Spain. *Journal of Retailing and Consumer Services*, 46, 58–69.
- Liebana-Cabanillas, F., Sanchez-Fernandez, J., & Munoz-Leiva, F. (2018). Role of privacy concerns in Spanish young users' intention to disclose personal information on social networking sites. *Computers in Human Behavior*, 81, 30–40.
- Liu, C., Marchewka, J. T., Lu, J., & Yu, C. S. (2019). The role of security awareness in influencing individuals' intention to use online banking: An exploratory study. *Information and Management*, 56(3), 412–426.
- Liu, F., & Li, D. (2019). The impact of perceived product risk on online consumer satisfaction: A mediated moderation model. *International Journal of Consumer Studies*, 43(3), 235–244.
- Liu, X., He, J., &Gao, F. (2016). Exploring factors influencing Chinese consumers' online shopping behaviors: A multidimensional perspective. *Computers in Human Behavior*, 61, 67–77.
- Lohse, G.L., Bellman, S. and Johnson, E.J. (2000) 'Consumer buying behavior on the internet: findings from panel data', Journal of Interactive Marketing, Vol. 14, No. 1, pp.15–29.
- Maignan, I. and Lukas, B.A. (1997), "The nature and social uses of the internet: a qualitative investigation", Journal of Consumer Affairs, Vol. 31 No. 2, pp. 346-371.
- Masoud, E.Y. (2013), "The effect of perceived risk on online shopping in Jordan", European Journal of Business and Management, Vol. 5 No. 6, pp. 76-87.
- Nielsen, A. (2008). Grocery store choice and value for money: A global nielsen consumer report. Technical Report, January.
- Pakwired. (2017, July 20). EasyPaisa Now Lets Users Create Mastercard Credit Card Within Seconds. http://parkwired.com
- Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. International Journal of Electronic Commerce, 7(3), 101-134.
- Popli, A. and Mishra, S. (2015), "Factors of perceived risk affecting online purchase decisions of consumers", Pacific Business Review International, Vol. 8 No. 2, pp. 49-58.

Roscoe, J. T. (1975). Fundamental research statistics for the behavioral sciences [by] John T. Roscoe.

- Seiders, K., Berry, L. L., & Gresham, L. G. (2000). Attention, retailers! How convenient is your convenience strategy? MIT Sloan Management Review, 41(3), 79.
- Sin, L., &Tse, A. (2002).Profiling internet shoppers in Hong Kong: Demographic, psychographic, attitudinal and experiential factors. Journal of International Consumer Marketing, 15(1), 7–29.
- Sorce, P., Perotti, V., &Widrick, S. (2005). Attitude and age differences in online buying. *International Journal of Retail and Distribution Management*, 33(2), 122–132.
- Suki, N. M., &Suki, N. M. (2021). Examining the factors that influence consumer purchase intentions in e-commerce. Journal of Entrepreneurship and Business, 9(2), 115-131.
- Teo, T.S. H. (2002). Attitudes toward online shopping and the internet. Behaviour and Information Technology, 21(4), 259-271.
- Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2014). From multi-channel retailing to omni-channel retailing. *Journal of Retailing*, 91(2), 174–181.
- Voskuyl, T., Kerkhof, P., & Verhoef, P. C. (2018). The impact of perceived product variety on customer loyalty: A meta-analysis. *Journal of Retailing*, 94(1), 61–85.
- Wang, D., Li, X., & Zhang, W. (2016). The influence of website information transparency on online purchase intention: A mediating role of trust and perceived risk. *Computers in Human Behavior*, 60, 287–297.
- Wang, L., & Chen, L. (2021). Understanding the impact of perceived benefits on Chinese online shoppers' purchase intention. *Journal of Consumer Marketing*, 38(4), 498–510.
- Wang, X., Yeh, R. K., & Huang, S. L. (2019). Effects of perceived product risk on purchase intention: An empirical study of online consumers in China. International Journal of Information Management, 46, 264-273.
- Wang, Y., Wang, Y., & Wang, Y. (2017). The effects of consumer characteristics, perceived risk, and familiarity on online banking adoption. Journal of Internet Banking and Commerce, 22(3), 1-18.
- Yin, Y., & He, S. (2020). Does perceived risk matter? Assessing the impacts of perceived risk on consumers' online purchase intentions of fresh food.International Journal of Environmental Research and Public Health, 17(4), 1264.
- Zhang, M., Li, X., Yang, J., & Zhang, J. (2018). When high price is not a turn-off: The moderating role of consumer knowledge in perceived price fairness. *Journal of Retailing and Consumer Services*, 41, 37–45.
- Zhou, L., Dai, L. and Zhang, D. (2007) 'Online shopping acceptance model-A critical survey of consumer factors in online shopping', Journal of Electronic Commerce Research, Vol. 8, No. 1, p.41.
- Zhou, T., Lu, Y., & Wang, B. (2014). Integrating TTF and UTAUT to explain mobile banking user adoption. Computers in Human Behavior, 40, 411-419.