

Influence of Social Media on Consumers' Online Purchasing Habits During: The COVID-19 Pandemic in Pakistan

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ARTICLE INFO	ABSTRACT
<p><i>Article History:</i> Received: 11 Jan, 2023 Revised: 21 Feb, 2023 Accepted: 28 Feb, 2023 Available Online: 07 Mar, 2023</p> <p>DOI:</p> <hr/> <p><i>Keywords:</i> <i>Social media, Online shopping, Pakistani consumers, COVID-19 pandemic, PLS-SEM</i></p> <hr/> <p><i>JEL Classification:</i> M31</p>	<p>Currently, businesses located all over the world are adjusting to a new standard of operation. Customers are encouraged to make their purchases of necessities through the favored e-commerce platform of the organization. For the purpose of marketing web-based enterprises, websites such as Facebook, Twitter, Instagram, and Pinterest are utilized. The purpose of the study was to investigate how the COVID-19 epidemic altered the purchase patterns of Pakistani customers shopping online, with a particular emphasis on the role played by social media. The study utilized a quantitative research model and a descriptive research technique in its data collection and analysis. In order to obtain responses from 400 Pakistani clients, an online questionnaire employing the "purposive sampling" method was used. When looking at the data and putting the hypothesis to the test, PLS-SEM analysis was utilized. During the COVID-19 pandemic in Pakistan, a PLS-SEM study indicated that advertising tools, online reviews, and endorsements from celebrities had a favorable and significant effect on how individuals bought products online. According to the findings of this study, online businesses can improve their use of social media for marketing and advertising by following a number of particular measures. Customers have a greater propensity to make purchases via social media platforms when they come across favorable evaluations and recommendations from celebrities.</p> <hr/> <p>©2023 The authors, under a Creative Commons Attribution-Non-Commercial No-Derivatives 4.0.</p>

INTRODUCTION

The worldwide spread of the COVID-19 virus has had devastating effects on many communities and individuals throughout the globe. Business and consumer behavior have shifted in unprecedented ways in response to this unprecedented scenario, with far-reaching consequences for both. Research conducted following the initial shock reveals that customer attitudes towards products and brands have shifted globally (Eger et al., 2021). This article examines the reasons why Czechs reacted by making impulsive purchases during the COVID-19 pandemic. SARS corona-virus 2 (2019-nCoV), also known as the novel corona virus (nCoV) of 2019, is rapidly expanding over the globe and represents a new

public health hazard for the entire human race (SARS-CoV-2) (Moon et al., 2021). Researchers in Wuhan, Hubei Province, China, traced the virus identified in humans back to animals. As of March 5, 2020, around 96,000 people have been infected with the 2019 corona-virus (COVID-19) as of March 5, 2020, with about 3,300 people losing their lives to the virus. Symptoms may not appear for 2–14 days, depending on the strain, and the sickness is transferred through contact with infected droplets or through inhalation. Common symptoms include a high body temperature, a hacking cough, a sore throat, difficulty breathing, excessive weariness, and a general feeling of being sick. Most people experience mild to moderate manifestations of the common symptoms. The symptoms are usually rather modest (J. Li et al., 2020).

Millions of people had to be quarantined and kept safe when the COVID-19 virus swept over the planet at the start of 2020. This lasted until roughly the middle of March. Since then, regular routines have been disrupted by the urgent measures required to halt the spread of the COVID-19 pandemic (Heyns & Kilbourn, 2022). People have been buying frantically for weeks since the virus has kept them indoors and worried. Supply chains were already fragile before this, and now it's even worse, which is bad news for consumers' wallets. However, there may be issues in really unusual situations. In particular, this applies to the elderly and those who are already struggling with several health issues. The global dissemination of the corona virus has resulted in numerous negative health outcomes (Sharma & Jhamb, 2020). Most companies have suffered financial losses as a result of the COVID-19 corona virus because of the extra precautions they have had to take to prevent the virus's spread. As people strive to prevent the spread of the disease by avoiding contact with others, isolating themselves, and restricting their travel, institutional and commercial performance have taken a major hit. The global spread of the COVID-19 virus has had far-reaching consequences for economies and cultures everywhere it has appeared. The impact on various segments of society varies (Marinković & Lazarević, 2021).

A customer's typical journey from understanding he needs something to making a purchase and providing feedback entails a search for information, evaluation, purchase, and finally, feedback. Customers only buy one product or brand out of several available options (Chauhan et al., 2020). What people decide to buy is influenced by these factors. There are many distinct types of consumers, and it's crucial to segment them according to characteristics like their level of brand awareness and commitment. What Hawkins and Mothersbaugh call "purchasing interest?" Managers and marketers in retail establishments benefit from understanding consumers' shopping habits and opinions on items and services (Safara, 2020). According to the study's authors, customers have adjusted their spending patterns after becoming aware of the merits of previously unknown services (Cullen et al., 2022). Businesses can learn a lot about their target audience's opinions thanks to the abundance of user-generated content on social media (M. W. Akram et al., 2022). Customers may alter their purchasing habits if they feel they can trust other users. Purchasing goods and services online has become routine for many consumers. In post-purchase, a consumer learns about a product, makes a choice based on what they've learned and the product's transaction criteria, compares that option to others, and learns more about the product's worth (Aryani et al., 2021). An individual's disposition impacts their propensity to

shop online (Abbas, 2020). People use social networking sites for both business and pleasure in this age of instant global communication.

According to E-marketer, some of the uses that businesses have found for social networking sites include market research, management of brands and customer relationships, management of sales promotion, management of service and service delivery, and management of customer service and service delivery (Alaimo et al., 2020). Research has shown that social progress can improve media marketing tactics. Subtle shifts in behavior and perspective have occurred all across the world as a result of what people have read online. This has led to a dramatic increase in the frequency with which people conduct business online (Andruetto et al., 2021). Even if some Pakistanis have started doing their shopping online, the majority of people there are still not familiar with what it entails (M. W. Akram et al., 2022). Most people are familiar with what the Internet is and how it may be helpful. More and more individuals are choosing to shop online due to the numerous advantages it provides in terms of affordability, information accessibility, and freedom of choice (Hoekstra & Leeflang, 2020). Online shopping is growing more popular in Pakistan as more young people do it. They, like their compatriots around Asia, are on the lookout for alternative payment methods. Recently, there has been a worldwide shift toward internet shopping. Consumers' social media usage is a key determinant in deciding whether or not to make an online purchase (Batada, 2021). Lockdowns, seclusion, and a (Abbas et al., 2020) generalized fear of catching COVID-19 caused shoppers to stop pouring into retail centers in great numbers. Businesses may nudge people to buy from their online storefronts by using social media platforms like Facebook, Twitter, Instagram, and Pinterest. Social media can help businesses grow their online sales by generating more interest in and knowledge about their goods and services (Sanwal & Ullah, 2021). Using social media, businesses can get their customers and potential customers to shop on their e-commerce sites.

Social media is recent phenomena which have spread out very quickly affecting all the races of life. Live broadcasting, celebrity endorsements, online customer evaluations, and marketing techniques like targeted advertising have had an impact on consumers' perceptions of brands. While the corona virus pandemic was in full swing, many retailers offered home delivery services. People's purchasing decisions are heavily influenced by the opinions of others when they shop online (Gordon-Wilson, 2022). Both consumers and retailers stand to benefit from the rise of e-commerce. There are those in today's society who just do not have the time to make any kind of transaction due to their overwhelming schedules. For this reason, a swift entry into the market is now difficult. They like to make all their purchases, big and small, on the web. Nowadays, consumers like shopping in more laid-back environments, such as on social media. Advertisers can narrow their audience on social media sites like Facebook and Twitter (Shetty & Shetty, 2021). As a result, social media marketing techniques outperform more conventional approaches. If a well-known person or other customers rave about a product that increases the likelihood that other people will buy it. This investigation into the part played by social media in shaping consumer behavior was motivated by the many influences on that behavior. Academics have recently been paying a lot of attention to the practice of sending money abroad through internet marketplaces. People now act differently (CETINÄ et al., 2022). It is possible that there are not enough research in all nations because the subject of social commerce is still

relatively new; nonetheless, online social media is a relatively new technology that has grown fast over the past few years.

This study examines online shopping. Most research on social media's impact on online shopping have focused on how it affects consumers' buying decisions, happiness with their purchases, and other metrics for merchants. Policymakers and other individuals who wish to learn more about how notable Pakistani consumers and retailers responded to live streaming, celebrity endorsements, marketing collateral, and online reviews during the widespread COVID-19 outbreak would find this study to be a very useful resource. The study aimed to determine how COVID-19 affects online shopping among Pakistani social media users. The study aims to examine how Pakistanis view online media, the effects of the COVID-19 epidemic, and how Pakistani consumers' online purchase patterns have changed. Live streaming, celebrity endorsements, marketing methods, and online reviews are also being studied. The study's framework will be based on theoretical concepts, ideas, and heuristics. Using earlier research, we'll evaluate the link between the dependent variable and independent factors.

Important study-related queries are as follows: Does real-time broadcasting increase or decrease the likelihood of immediate purchases? How does a famous person's recommendation assist you in making a purchase online? What effect do promotional tools have on consumers' propensity to make online purchases? The connection between web browsing and online shopping is not clear. What role does each play in the other? The study procedure involves several distinct stages. Firstly, the author provides a brief overview of the relevant literature. In the second place, we provide supporting evidence for a conceptual model and make predictions based on it. In the third place, the methods used in this study are discussed. Results and explanations of the work are presented in the fourth section. Finally, the research's shortcomings and potential future directions are discussed in "Discussion, Conclusions, and Implications." The paper also talks about how important the findings are and how they compare to other research.

LITERATURE REVIEW

Lim (2022) describes SIT (Social Influence Theory) as the study of how one person's views, attitudes, and subsequent behaviors or conduct can have an effect on others through the three mechanisms of compliance, identification, and internalization (Susmitha, 2021). Persuasion is thought to take place when a person is swayed by outside forces and agrees to engage in the activity that has been suggested in order to increase rewards and decrease penalties. Consequently, the social impact of acquiescent influence is the root cause of the satisfaction that comes after compliance (Bauerová & Zapletalová, 2020). It is possible to argue that identification has taken place when individuals make use of various forms of persuasion in order to establish or sustain a relationship with another individual or group that is desired and helpful. It is anticipated that internalization will take place when individuals are persuaded and then observe that the performance, in which the content pertains to the behaviors and attitudes of other individuals, is pleasant (Febe & Ilena, 2021). When carrying out their responsibilities, influencers act as third parties that possess the power to dramatically change the opinions, decisions, and behaviors of a company's clients and consumers. Anyone can exercise influence in a community if they can persuade customers to purchase goods and services from within

the community (Tripathy, 2022). Word-of-mouth is the transmission of information from one person to another, which influences customers as it travels from person to person. The activities of famous people can have an effect on sales since they increase consumers' awareness of the brand.

Information processing theory

The core idea behind Human Information Processing Theory is that people's ability to learn, visualize, and apply data to their decision-making processes is what sets it apart from other information processing (Siddle & Spinks, 2021). Individuals' responses to ecological events, encoding of new information, making connections to prior knowledge, storage, and retrieval of learned material, and so on are all conceptualized under the knowledge process hypothesis (Vuong, 2023). The study found that consumer' preferences were affected by the way in which information was presented to them. Customer preferences are shown to be the driving force behind online purchases in this investigation. Customers' decision-making is heavily influenced by information. Consumers are influenced to make a purchase after reading about a product online or hearing that a celebrity endorses it (Öhman, 2021).

Live streaming

Consumer tastes, routines, and spending patterns were not immune to the worldwide disruption caused by the corona virus pandemic. E-commerce was boosted on social media around the time of the Corona Pandemic (Abbas et al., 2022). Live streaming enables internet merchants to provide clients with up-to-the-moment footage of products, showcasing their features and qualities in an unfiltered format. In the past, social retailers limited questions to those directly relevant to the products themselves; today, however, customers can pose a question to a streamer through a screen and receive an instant response. Streaming in real time allows for a constant flow of communication between retailers and consumers (Sripanidkulchai et al., 2004). Live product demonstrations are available to online shoppers, and they are known to increase sales. If customers have any questions regarding a product, they can have them answered by looking at a picture of it (Veloso et al., 2002). Customers are more likely to buy a product if they can easily picture themselves using it. Aside from positively influencing clients' perceptions of the products, participation in live product presentations also serves as a strong incentive to purchase the showcased items. Despite the fact that buyer commitment has been identified as an important antecedent promoting purchaser purchasing in online spending, few investigations have investigated the prerequisites and outcomes of consumer assignment in reference to live streaming shops (Smith et al., 2013). Customers need concise product information and like to see the products in action during a live presentation before making a purchasing decision. It makes customers feel like they're part of the process. In addition, the abundance of money spent on live streaming makes it easy to wow customers. As a result, audiences regularly report feelings of total absorption. In addition, live presentations can broadcast comprehensive videos to consumers, and vendors can demonstrate how to utilize the products via live streaming, allowing for a more tangible experience with the product. Buying based on a product's visual appeal is experiencing unprecedented expansion. Conversely, the live-streaming sector is just getting started (Yi Li et al., 2020). Live events feature celebrity endorsements of products and speeches intended to inspire the audience. As more people begin to shop online, more businesses are beginning to offer live support or visual displays via test chatting, instant messaging, and live product presentations. When it comes to e-commerce websites, businesses and customers can have

live, two-way conversations in real time (Bonald, Massoulié, Mathieu, Perino, & Twigg, 2008). Live video broadcasting facilitates instantaneous interaction between vendors and customers. Consumers have grown accustomed to internet visual presentations and product characteristics and are more likely to make purchases of things that appeal to them (Kaytoue, Silva, Cerf, Meira Jr, and Raïssi, 2012).

Celebrity endorsement

Facebook, Snapchat, Instagram and Twitter are just a few of the numerous available social networking sites. The use of social media grows rapidly in popularity every day (Erdogan, 1999). Popular figures are spreading product information through a variety of social media channels. Instagram's fame is having an effect on how people shop online. Customers' purchasing decisions have been bolstered by the widespread dissemination of information made possible by social media (Yaoqi Li et al., 2022). When a person achieves celebrity status, they often attract large fan bases that form an online community around them. Companies put a premium on social media stars as a means of encouraging online purchasing. Fans mimic their favorite stars' every move, from where they vacation to what they wear and what restaurants they frequent, all thanks to the celebrity's social media posts (Sanwal & Ullah, 2021). To maximize the success of their social media marketing campaigns, businesses often employ the help of celebrities. Fans of famous people frequently contact businesses asking for referrals (Abbas et al., 2023).

Promotional tools

Both cultural norms and technological advancements progress rapidly. Both consumer preferences and the fortunes of established corporations are constantly shifting (Hysa et al., 2021). Because of the rise of online marketing, businesses now have more promotional channels to choose from than ever before. The study found that when compared to traditional marketing, internet marketing was much simpler thanks to e-commerce and e-marketing. Ads in the media have been linked to changes in consumer habits, according to the study's authors. Academics are looking into the effectiveness of social media advertising (Toubes et al., 2021). Because the customer doesn't stop to think about whether or not it's a good time to buy more, online sales go up thanks to the promotional pricing campaign. One social media post even mentioned a buy-two-get-one-free promotion, which is sure to entice customers. Infante and Mardikaningsih (2022) discovered that young people would rather purchase online than at traditional stores. It's much simpler to investigate a product's availability thanks to social networking. Privacy, trust, and safety are encouraged on social networking platforms. Electronic marketing technologies are used by online advertising agencies to research markets, test advertising theories, and learn about customers' buying habits. Contextual ads on banners, rich social network ads, media ads, spam my email and online classified ads marketing are all examples of internet advertising, according to (Isnain et al., 2021). Online product reviews in terms of quantity, handling of bad reviews, positive reviews, and overall review quality. The majority of consumers now use the internet prior to making a purchase.

Online shopping behavior

As a result of the COVID-19 outbreak, several companies shifted their marketing efforts online. With the help of online marketing, you can optimize business processes, reduce administrative costs and turnaround times, maintain social distance, work from the comfort of your own home, protect your

computer from viruses, and strengthen relationships with customers and business associates (Nofrialdi, 2021). The proliferation of different kinds of online reviews has greatly aided consumers' ability to make informed purchasing decisions while shopping online. Several companies have opted to use the possibilities presented by social media in order to expand their consumer base (Bangun & Handra, 2021). Customers' motivational moods are influenced by real-time a streaming stimulus, which in turn affects their online purchasing behavior.

Conceptual Framework

Hypotheses development

Zhai, Kanij, and Grundy (2022) contends that customers are more likely to make a purchase when a live broadcast reduces the perceived distance between the company and the customer and alleviates any doubts the buyer may have about the legitimacy of the transaction. Tolunay and Ekizler (2021) found that in order to enhance viewership and conversion rates, sellers of live streaming services need to emphasize a few important benefits. Putting on a live presentation gives businesses a chance to expose their products to potential customers in a novel method, which, as the study and literature suggest, may increase the positive emotions and impressions of the product among consumers. With this kind of transparency, customers will have more faith in the seller and their products. Accordingly, it is expected that

H1: Online shopping behavior is significantly impacted by live streaming.

Ismail and Wahid Builds and evaluates an integrated model of online celebrity endorsement by studying the impact of consumer compatibility on sales. Pahasing et al., (2022) asserts that the way an audience feels about an online celebrity impacts whether or not they will buy a product endorsed by that celebrity. There is evidence from various sources that suggests that when a well-known individual recommends a product or brand, customers get more enthusiastic about it. This is due to the fact that consumers place a high value on endorsements and view celebrities as indicators of both product and brand suitability and credibility. As a result, having a famous person back a product could increase its appeal to the public. Since this is the case, it is expected that

H2: Celebrity endorsement is effective in encouraging consumers to make purchases online.

As shown in studies and literature, sales promotions can affect the timing, brand, quantity, and even switching of brands. Marketers can increase sales once again by forming long-lasting bonds with customers through sales promotion. The preceding explanation suggests that there is a positive correlation between promotional tools and the intent to buy. Accordingly, it is expected that

H3: The use of promotional tools has a favorable impact on the manner in which people shop online.

Rout et al., (2022) think that businesses should encourage their clients to write evaluations on various social media sites. If an online review is thorough and includes specifics about the product being evaluated, customers are more likely to trust it. Past studies and studies that have been published have shown that peer reviews and consumer opinions are major factors in consumers' decisions to make purchases online. Therefore, it is reasonable to expect that:

H4: There is a substantial effect of online reviews on online purchasing habits.

There are four recognized independent variables that influence online shopping behavior: promotional tools, online reviews, live streaming, and celebrity endorsements. Previous studies and discussions served as the basis for the conceptual framework.

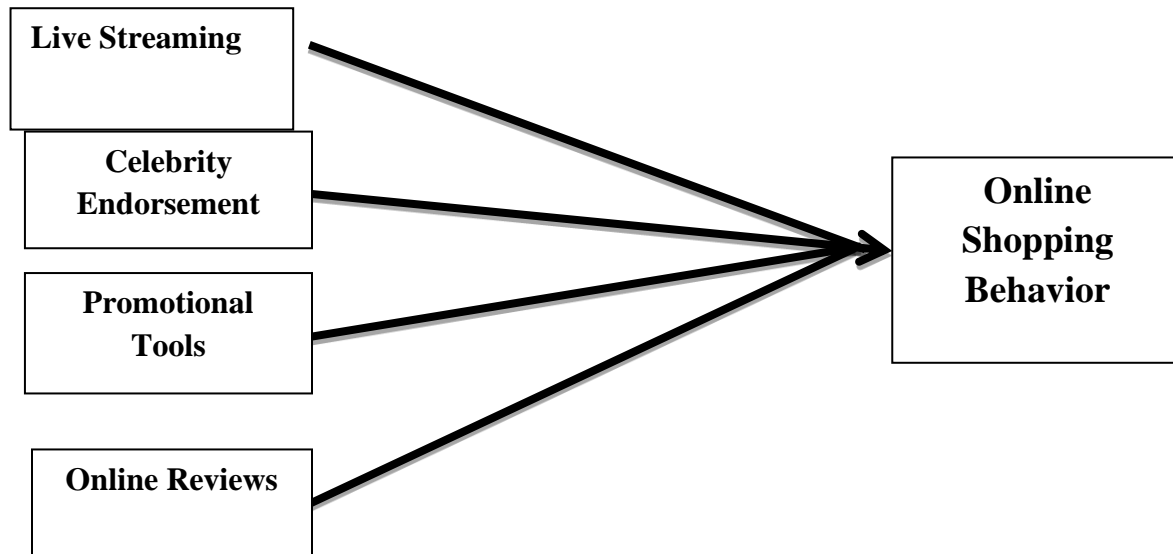


Figure 1. Theoretical Framework

RESEARCH METHODOLOGY

For When gathering data and analyzing it through their combination, researchers employed a study design. The quantitative survey methodology was used to compile this study's data, which was gathered through the use of a structured questionnaire. The researchers used a survey with both convenience and judgmental sampling strategies to test the hypothesis. This study used a descriptive method to find out from the people who took part how social media affects the way they shop online.

Research Data Collection

In the course of this investigation, the participants were tasked with filling out questionnaires. The results of this research show that every subject willingly accepted to take part in the study after being provided with sufficient information regarding the potential dangers of taking part. In order to finish the investigation and create the final report, we used a variety of sources, including primary as well as secondary. A survey as well as a specialized questionnaire was utilized in order to collect the primary data. For the goal of doing market research, companies might collect client feedback through the use of questionnaires. Researchers undertake online surveys in order to gain a better understanding of the ways in which social media influences shopping behaviors conducted online. A Google form was developed and distributed through a variety of internet means in order to collect information obtained from respondents in their own words (email, social media, messaging apps, etc.). Participants who

regularly use social media platforms such as Twitter, Facebook, YouTube, Pinterest, and other similar platforms were the primary target audience for the study. The information that was used in this inquiry was gleaned from a wide range of secondary sources, such as academic journal papers, mainstream media reports, and interviews with members of the general public.

Method and Technique of sampling

People in this group are over 15 years old and active on social media. They make up the study's sample population. Thus, the general public is unaware of this study. There is no predetermined section of the population from which to draw samples for this study. Those who are considered part of the population include academics, business professionals, managers, and educators. Online purposive sampling and other non-probability sampling strategies were used to select participants for this study. The corona pandemic is when this data was gathered. The researcher used a Google Form Link to distribute the questionnaire and then shared the link with a variety of people who were able to fill it out. Because of the low cost and short time required to create a sampling frame, non-probability sampling has been widely employed. Purposive sampling is one of many non-probability sampling methods used because it is readily available, produces low costs, and is easy to implement. Purposeful sampling is used to select a representative sample of 400 people from whom to obtain quantitative data from a custom-made survey. From the 36 districts that make up Punjab, Pakistan, the sample of $N = 400$ was drawn. These districts include Lahore, Bahawalpur, Multan, and Faisalabad.

Measurement scale of dependent and independent variable

A Likert Scale was employed in the research (5 ratings). The effect of social media on consumers' propensity to make purchases online during the corona-virus epidemic is measured using a Likert Scale that compiles responses from a random sample of respondents. Each statement was given a score between 1 (strongly disagree) and 5 (strongly agree) on the five-point Likert scale.

Data analysis

The questionnaire results were evaluated with smart-PLS version 3.0 software. Utilizing structural equation modeling, we were able to demonstrate the validity of the study's conceptual model (SEM). Quantitative measures such as percentile ranks and frequency distribution were heavily employed to characterize the distribution of study samples. The study's descriptive data, including the mean and standard deviation, were analyzed (standard deviation). Determined multicollinearity among independent variables by collinearity statistics. We also employed composite reliability and Cronbach's alpha to ensure the accuracy of the data and scale items (Calvo-Porrá, Rivaroli, & Orosa-González). There were comparisons made between the Fornell-Larcker Criterion and the Heterotrait-Monotrait ratio (HTMT) in terms of their ability to distinguish between two sets of data.

Quality of data assurance

Research objectives, measurement scales, data collection methods, and questionnaires were all familiar to enumerators and supervisors. Every day, superintendents carefully manage the data they have collected and make sure it is correct and complete before putting it into Smart-PLS version 3.0 to be processed and analyzed further.

RESULTS AND DISCUSSIONS

Descriptive analysis

The average and standard deviation scores were utilized to investigate everything in the study. All of the constructs were ranked by the average standards we identified for them. Table 1 shows that the mean score is highest for online reviews (M 14 4.1253) and lowest for celebrity endorsements (M 14 3.3928). The majority of the components had moderate mean scores. As a result, the factor means scores suggest there may be no greater variation across all views.

Table 1. Descriptive statistics analysis.

Constructs	N	Mean	Std.Deviation	Rank
Live Streaming	400	3.8956	.65678	3
Celebrity Endorsement	400	3.3928	.95654	4
Promotional Tools	400	3.8989	.62236	2
Online Reviews	400	4.1253	.52471	1

Multi-Collinearity test

The strongly correlated independent variables in the study were measured using a multi-collinearity test. Collinearity in the predictor structures had an effect on the predicted path coefficients. Collinearity between predictor constructs can be identified when the tolerance value falls below 0.10 or the variance inflation factor value rises above 5. Based on the collinearity statistics, Table 2 shows that the tolerance and VIF values fall within a reasonable range. So, it was thought that multi-collinearity wouldn't change the ability of the independent variable to act as a stand-in for the outcome variable.

Table 2. Multi-Collinearity test.

Constructs	Collinearity Statistics	
	Tolerance	VIF
Live Streaming	.621	1.549
Celebrity Endorsement	.616	1.598
Promotional Tools	.640	1.619
Online Reviews	.589	1.599

Measurement model analysis

When talking about PLS-SEM, the term "outer model" refers to "the measurement model as a member of a theoretical route model that holds the pointers and their links to the factors." In this research, we use confirmatory factor analysis (CFA) to check if the variables are loaded onto the correct constructs. The structural equation modeling for this research was performed using Smart-PLS version 3.0.

Uni-dimensionality

The uni-dimensionality component in the current construction indicates that all measurement items have an adequate factor loading consistent with the associated latent construct. According to (Tan,

Khan, & Lau, 2022), there is a metric for each factor with a 0.70 minimum factor loading. In Table 3, factor loadings for online reviews (OR1) and online buying behavior (OSB6) are 0.669 and 0.659, respectively. The OR1 and OSB6 factor loading values, on the other hand, are practically at the 0.70 threshold. The validity of uni-dimensionality as a measurement model is thus validated, and the study can be recommended.

Table 3.Measurement model summary.

Construct	Items	Factor Loading	AVE	CR	Cronbach's α
Live Streaming	LS1	0.710	0.579	0.851	0.758
	LS2	0.759			
	LS3	0.767			
	LS4	0.789			
Celebrity Endorsement	CE1	0.841	0.731	0.923	0.881
	CE2	0.879			
	CE3	0.839			
	CE4	0.848			
Promotional Tools	PT1	0.741	0.579	0.854	0.758
	PT2	0.821			
	PT3	0.719			
	PT4	0.779			
Online Reviews	OR1	0.669	0.541	0.823	0.731
	OR2	0.748			
	OR3	0.751			
	OR4	0.759			
Online Shopping Behavior	OSB1	0.769	0.569	0.891	0.849
	OSB2	0.788			
	OSB3	0.769			
	OSB4	0.821			
	OSB5	0.731			
	OSB6	0.659			

Construct reliability tests

Cronbach's alpha and composite reliability were used by the researcher to determine the study's internal consistency (Calvo-Porrall et al.). Composite reliability (Calvo-Porrall et al.) and Cronbach's alpha values of 0.70 or higher are considered acceptable to good for scientific study. The suggested settings are listed in the table below. Table 3 displays CR and Cronbach's alpha values, and they are all above .70, indicating that the reliability of the questionnaire is high. Since the researcher wanted to make sure that future studies could rely on the constructs, he or she recommended making them reliable.

Convergent validity tests

The convergent validity of the latent constructs is ensured by the fact that the average variance extracted (AVE) is either 0.50 or more than 0.50. As can be seen in Table 3, all of the average variance extracted (AVE) values in this investigation have a magnitude that is higher than 0.50. This is because the constructs are suitable for the conduct of more research.

Discriminant validity tests

In order to maintain discriminant validity, each latent idea must be empirically distinguishable from any other cross-loading that may occur among the latent constructs. Establishing discriminant validity involves matching the correlation coefficients of the constructs with the square roots of the average variance that has been extracted (AVE). According to Table 4, the off-diagonal inter-construct similarities have lower numbers than the diagonal inter-construct similarities. Regardless of this fact, the study's frameworks have credibility thanks to the discriminator.

Table 4. Discriminant validity: Fornell-Larcker Criterion.

	Celebrity Endorsement	Live Streaming Online Reviews	Online Shopping Behavior	Promotional Tools
Celebrity Endorsement	0.861			
Live Streaming	0.542	0.773		
Online Reviews	0.541	0.487	0.730	
Online Shopping Behavior	0.679	0.491	0.579	0.760
Promotional Tools	0.468	0.478	0.532	0.567
				0.758

An Analysis of the Model That Was Employed to Measure (Inner Model) before doing an analysis of the structural model relationship, one must first ensure that all measurement models may be regarded as legitimate. This was recommended by the measurement model used in the study. Through the process of analyzing the structural models, the researcher is able to identify which models are acceptable and which are not. This is done on the basis of the presence or absence of relationships that are statistically significant. In addition, the researchers assessed the significance of the path coefficients by employing a bootstrapping method on a subsample of 500 individuals to make their determination. The structural model analysis includes all of the following components: paths, path coefficients, t-values, and p-values, as well as the outcomes of the path coefficients. In order to assess the hypotheses, a t-test with two different branches and a significance level of 5% were used. If the t-value is higher than the cutoff for significance, which is set at 1.96, then the coefficients can be considered significant.

Table 5. Structural model estimates.

Path	Coefficient (B)	t-values	p-values	Results
Live Streaming->Online Shopping Behavior	0.038	0.889	0.381	Rejected
Celebrity Endorsement->Online Shopping Behavior	0.451	10.199	0.000*	Accepted
Promotional Tools - > Online Shopping Behavior	0.216	3.810	0.000*	Accepted
Online Reviews - > Online Shopping Behavior	0.209	4.910	0.000*	Accepted

Table 5 demonstrates that there is a positive and statistically significant association between the path coefficients of three latent components and online shopping behavior. These constructs are celebrity endorsements, promotional tools, and online reviews. The authors declare that they agree with hypotheses H2, H3, and H4 in this particular section of the paper. However, there is not a positive association that can be shown to be statistically significant between hypothesis H1 and actual online shopping behavior. As a direct consequence of this, H1's live streaming was judged inappropriate.

According to Table the celebrity endorsement perspective has the highest path coefficient, which implies that an increase in online purchasing behavior of 0.451 standard deviation units is feasible if celebrity endorsement grows by one standard deviation unit, provided that no other independent perspectives undergo any changes. This is based on the assumption that there would be no changes to any other independent viewpoints.

DISCUSSIONS

Today, In light of the recent COVID-19 outbreak in Pakistan, this study set out to investigate the role that social media played in shaping consumers' decisions to shop online there. Most research has focused on how consumers' exposure to social media prior to, during, and after the buying process can affect their expectations, feelings, behaviors, intentions, and loyalties. During the COVID-19 pandemic, the impact of social media on Pakistani consumers' online shopping behavior received less study and attention than it otherwise may have. The data presented above demonstrates that three of the four facets of social media had a significant impact on the online shopping behavior of Pakistani customers during the COVID-19 outbreak, and that this impact was largely positive. During the COVID-19 pandemic, other social media didn't have much of an effect on online shoppers. At the 5% level of significance, positive correlations were found between the use of promotional tools ($\beta_1 = 0.215$, $t = 3.810$), online reviews ($\beta_2 = 0.207$, $t = 4.910$), and celebrity endorsements ($\beta_3 = 0.452$, $t = 10.199$) among online shoppers in Pakistan. The study indicated that celebrity endorsements, commercial materials, and internet reviews greatly positively affect online shopping behavior. Watching live events and buying online are not strongly correlated. Live broadcasting was unsupported due to the substantial p-value of 0.381. The study found little indication that online live events affect purchases. This study's celebrity endorsement value of 0.000 is substantially higher than 0.05. Celebrity endorsement seems to boost internet shopping. (Ngoh & Groening, 2022) found that positive celebrity endorsement affects consumers' propensity to make purchases online. From their analysis of the data, the team came to the inference that promotional tools had a salutary effect on customers' propensity to make purchases online. In this particular scenario, the value of 0.05 for the p-value is more than 0.00 for the significant value. The study found that a p-value of 0.00, which is far lower than the threshold for statistical significance set at 0.05, applies to online reviews. This indicates that there is a strong positive correlation between customers' online shopping behavior and online reviews. According to (Sutisna & Handra, 2022), there is strong proof that online reviews have an impact on consumers' propensity to make purchases after reading them.

Following the recent corona-virus outbreak in Pakistan, the various social media elements have become crucial instruments for influencing consumers' decisions to make purchases online. This study examines the impact of user reviews, advertising techniques, live streaming, and celebrity endorsements on the online purchasing behaviors of Pakistani consumers while the corona-virus epidemic unfolded. Product reviews, ads, and celebrity endorsements were determined to be the three most significant elements for Pakistani consumers while making an online purchase. Live broadcasts, on the other hand, had little effect on people's propensity to shop online for COVID-19-related supplies during the pandemic. The paper's findings offer internet businesses actionable advice for making the most of social media for advertising and promotion. People are swayed to buy products they read about

on social media platforms due to the number of vouchsafe evaluations and genuine celebrity endorsements.

CONCLUSION AND POLICY IMPLICATION

Even amid the corona-virus outbreak, people are getting used to buying things online. Facebook, Twitter, YouTube, WhatsApp, and countless others have amassed massive user bases in recent years. It is widely accepted that consumers' willingness to shop online is positively influenced by social media. Due to the proliferation of internet advertisements, consumers are influenced to complete their purchases online. Consumers' propensity to make online purchases was found to increase after they were exposed to promotional materials and celebrity endorsements. Meanwhile, the influence of social media on online shopping is expanding. Companies' attention on marketing has shifted to social media during the current corona-virus outbreak. Although research into the impact of social media on e-commerce has been done, there hasn't been much new study of the topic in recent years. In order to fill in the blank, this research looks at how customers' willingness to shop online is influenced by social media. There is no proof that people who watched live material or made purchases online were more likely to contract COVID-19. However, there is a positive correlation between the number of celebrity endorsements and online shopping. Consumers' inclination to shop online increased as a result of marketing efforts and feedback from other buyers during the Corona pandemic. Numerous resources are devoted by companies and business groups to social media marketing initiatives. Because of the COVID-19 pandemic, people have changed the way they shop online.

Limitations and future research

The study sought to discover the factors that influence COVID-19-related internet purchases. Research paper restrictions abound. Live streaming, celebrity endorsements, promotional tools, and online reviews were the only antecedents used in this study to examine how social media affects online purchase behavior. Future four-antecedent studies should add more antecedents. Second, this study used an online purposive sample to evaluate how social media affects online shopping. Future studies on social media-based internet shopping should use experimental methods. Due to the COVID-19 epidemic, respondents completed a self-administered online survey. This made it difficult to learn more about responders. Field-level surveys and in-person interviews should be used to combat inaccurate data. Fourth, while this study uses quantitative data, qualitative data may yield different results. Future studies should analyze quantitative and qualitative data.

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